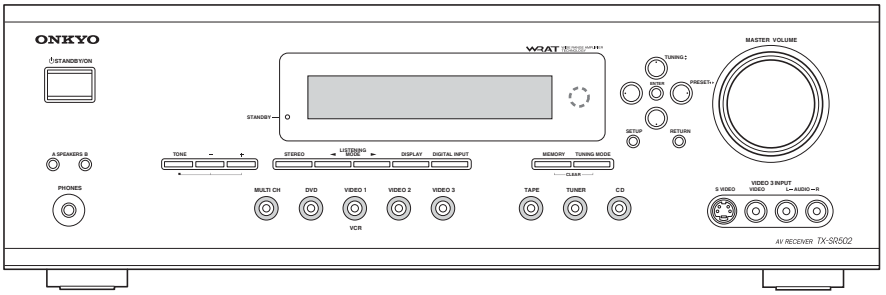
Ref. No. 3797
042004

ONKYO SERVICE MANUAL

AV RECEIVER

MODEL TX-SR502
TX-SR502E
TX-SR8250
HT-R520



American model
RC-567M
Others
RC-569M

TX-SR502 Black, Golden and Silver models

MDD, MDC	120V AC, 60Hz
MPA, MPT	230-240V AC, 50Hz
MWT	120V/220-230V AC, 50/60Hz
MGK, MGR, MGQ	220-230V AC, 50/60Hz

TX-SR502E Black and Silver models

MPP	230-240V AC, 50Hz

TX-SR8250 Golden model

MGR	220-230V AC, 50/60Hz

HT-R520 Black and Silver models

MDD, MDC	120V AC, 60Hz

SAFETY-RELATED COMPONENT WARNING!!

COMPONENTS IDENTIFIED BY MARK ⚠ ON THE SCHEMATIC DIAGRAM AND IN THE PARTS LIST ARE CRITICAL FOR RISK OF FIRE AND ELECTRIC SHOCK. REPLACE THESE COMPONENTS WITH ONKYO PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL.

MAKE LEAKAGE-CURRENT OR RESISTANCE MEASUREMENTS TO DETERMINE THAT EXPOSED PARTS ARE ACCEPTABLY INSULATED FROM THE SUPPLY CIRCUIT BEFORE RETURNING THE APPLIANCE TO THE CUSTOMER.

ONKYO®
IMAGINATIVE SIGHT & SOUND

SPECIFICATIONS-1

TX-SR502/502E/8250

Amplifier Section

Power output:	75 W (8Ω, 20 Hz-20 kHz, FTC)
All channels:	105 W (6Ω, 1 kHz, DIN)
	130 W (6Ω, 1 kHz, EIAJ)
Dynamic power:	2 x 180 W (3Ω, front)
	2 x 150 W (4Ω, front)
	2 x 95 W (8Ω, front)
THD (total harmonic distortion):	0.08% (rated power)
Damping factor:	60 (front, 1 kHz, 8Ω)
Input sensitivity and impedance:	200 mV/47 kΩ (LINE)
Output level and impedance:	200 mV/470Ω (REC OUT)
Frequency response:	10 Hz–100 kHz/+1 dB, –3 dB (Direct mode)
Tone control:	+12 dB, -12 dB, 50 Hz (BASS)
	+12 dB, -12 dB, 20,000 Hz (TREBLE)
S/N ratio (Direct mode):	100 dB (CD, IHF-A)
Speaker impedance:	6Ω~

Video Section

Input sensitivity, output level and impedance:

1.0 Vp-p/75Ω (component and S-Video Y)
0.7 Vp-p/75Ω (component P_B/C_B, P_R/C_R)
0.28 Vp-p/75Ω (S-Video C)
1.0 Vp-p/75Ω (composite)

Component video frequency response:

5 Hz–50 MHz

Tuner Section

■ FM

Tuning frequency range:	87.5–108.0 MHz
Usable sensitivity:	FM STEREO 17.2 dBf, 2.0 µV (75ΩIHF)
	FM MONO 11.2 dBf, 1.0 µV (75ΩIHF)
S/N ratio:	FM STEREO 70 dB (IHF-A)
	FM MONO 76 dB (IHF-A)
THD:	FM STEREO 0.3% (1 kHz)
	FM MONO 0.2% (1 kHz)
FM stereo separation:	45 dB at 1 kHz

■ AM

Tuning frequency range:	530–1700 kHz (American model)
	522–1611 kHz (Other models)
Usable sensitivity:	30 µV
S/N ratio:	40 dB
THD:	0.7%

General

Power supply:	American model: AC 120 V, 60 Hz
	Worldwide model: AC 220–230 V and 120 V switchable 50/60 Hz
	Other models: AC 230–240 V, 50 Hz AC 220–230 V, 50 Hz
Power consumption:	American model: 4.6 A
	Other models: 370 W
Standby power consumption:	2.5 W
Dimensions (W x H x D):	17-1/8" x 5-7/8" x 14-13/16" (435 x 150 x 376 mm)
Weight:	American, European and Australian models: 22.5 lbs. (10.2 kg)
	Asian model: 24.3 lbs. (11.0 kg)

■ Video Inputs

Component video inputs:	2 (DVD, Video 1/2/3)
S-Video inputs:	4 (DVD, Video 1–3)
Video inputs:	4 (DVD, Video 1–3)

■ Video Outputs

Component video outputs:	1 (Component Video Out)
S-Video outputs:	2 (Video 1 Out, Monitor Out)
Video outputs:	2 (Video 1 Out, Monitor Out)

■ Audio Inputs

Digital inputs:	4 (Optical 1–3, Coaxial)
Analog inputs:	6 (CD, Tape, DVD, Video 1–3)
Multichannel analog inputs:	5.1 ch (Front L/R, Center, Surround L/R, Subwoofer)

■ Audio Outputs

Analog outputs:	2 (Tape Out, Video 1 Out)
Subwoofer pre out:	1
Speaker outputs:	6+2
Phones:	1

Specifications and features are subject to change without notice.

SPECIFICATIONS-2

HT-R520

Amplifier Section

Power output: All channels:	130 W(8Ω , 20 Hz-20 kHz, FTC)
Dynamic power:	2 x 260 W (3Ω, front) 2 x 200 W (4Ω, front) 2 x 150 W (8Ω, front)
THD (total harmonic distortion):	0.08% (rated power)
Damping factor:	60 (front, 1 kHz, 8Ω)
Input sensitivity and impedance:	200 mV/47 kΩ(LINE)
Output level and impedance:	200 mV/470 Ω(REC OUT)
Frequency response:	10 Hz-100 kHz/+1 dB, -3 dB (Direct mode)
Tone control:	±12 dB, 50 Hz (BASS) ±12 dB, 20,000 Hz (TREBLE)
S/N ratio (Direct mode):	100 dB (CD, IHF-A)
Speaker impedance:	6 Ω～

Video Section

Input sensitivity, output level and impedance:	1.0 Vp-p/75 (component and S-VideoY) 0.7 Vp-p/75 (component PB/CB, PR/CR) 0.28 Vp-p/75 (S-Video C) 1.0 Vp-p/75 (composite)
Component video frequency response:	5 Hz-50 MHz

Tuner Section

■ FM

Tuning frequency range:	87.5-108.0 MHz
Usable sensitivity:	FM STEREO 17.2 dBf, 2.0 µV (75 Ω IHF) FM MONO 11.2 dBf, 1.0 µV (75 ΩIHF)
S/N ratio:	FM STEREO 70 dB (IHF-A) FM MONO 76 dB (IHF-A)
THD:	FM STEREO 0.3% (1 kHz) FM MONO 0.2% (1 kHz)
FM stereo separation:	45 dB at 1 kHz

■ AM

Tuning frequency range:	530-1700 kHz
Usable sensitivity:	30 µV
S/N ratio:	40 dB
THD:	0.7%

General

Power supply:	AC 120 V, 60 Hz
Power consumption:	4.6 A
Standby power consumption:	2.5 W
Dimensions (W x H x D):	17-1/8" x 5-7/8" x 14-13/16" (435 x 150 x 376 mm)
Weight:	22.5 lbs. (10.2 kg)

■ Video Inputs

Component video inputs:	2 (DVD, Video 1/2/3)
S-Video inputs:	4 (DVD, Video 1-3)
Video inputs:	4 (DVD, Video 1-3)

■ Video Outputs

Component video outputs:	1 (Component Video Out)
S-Video outputs:	2 (Video 1 Out, Monitor Out)
Video outputs:	2 (Video 1 Out, Monitor Out)

■ Audio Inputs

Digital inputs:	4 (Optical 1-3, Coaxial)
Analog inputs:	6 (CD, Tape, DVD, Video 1-3)
Multichannel analog inputs:	5.1 ch (Front L/R, Center, Surround L/R, Subwoofer)

■ Audio Outputs

Analog outputs:	2 (Tape Out, Video 1 Out)
Subwoofer pre out:	1
Speaker outputs:	6+2
Phones:	1

Specifications and features are subject to change without notice.

SERVICE PROCEDURES-1

1. Replacing the fuses

This symbol located near the fuse indicates that the fuse used is show operating type, For continued protection against fire hazard, replace with same type fuse, For fuse rating, refer to the marking adjacent to the symbol.

Ce symbole indique que le fusible utilise est e lent. Pour une protection permanente, n'utiliser que des fusibles de meme type. Ce demier est indique la qu le present symbol est apposre.

REF NO.	PART NO.	DESCRIPTION	NOTES
F6901, F6902	252199	10A-UL	DC, DD
F6901, F6902	252100	10A-EAK FUSE	GK, GQ, GR, PA, PP, PT, WT
F6901 or, F6902 or	252307	10A-TL250V	GK, GQ, GR, PA, PP, PT, WT
F901	252166	6.3A-UL/T-237	DC, DD, GR, WT
F901 or	252260	6.3A-T/UL-ST2	DC, DD, GR, WT
F902	252076	3.15A-SE-EAK FUSE	GK, GQ, GR, PA, PP, PT, WT
F902 or	252242	3.15A-SE-TL250V	GK, GQ, GR, PA, PP, PT, WT
F902 or	252276	3.15A-SE-TL250V	GK, GQ, GR, PA, PP, PT, WT
F903	252164	5A-UL/T-237	DC, DD
F903 or	252258	5A-T/UL-ST2	DC, DD
F903	252075	2.5A-SE-EAK FUSE	GK, GQ, GR, PA, PP, PT, WT
F903 or	252241	2.5A-SE-TL250V	GK, GQ, GR, PA, PP, PT, WT
F903 or	252275	2.5A-SE-TL250V	GK, GQ, GR, PA, PP, PT, WT

[NOTE]
<DD> : USA model only
<DC> : Canadian model only
<WT> : World wide model only
<GK> : Korean model only for 220V
<GR> : Chinese model only for 220V
<PP> : European model only for 230V
<PA> : Australian model only for230V
<PT> : Asian model only for 230V

2. Safety-check out

(Only U.S.A. model)
After correcting the original service problem perform the following safety check before releasing the set to the customer
Connect the insulating-resistance tester between the plug of power supply cord and terminal GND on the back panel.
Specifications: More than 10Mohm at 500V

3. To initialize the unit

This device employs a microprocessor to perform various functions and operations. If interference generated by an external power supply, radio wave, or other electrical sauce results in accident which causes the specified operations and functions to operate abnormally.
To perform a result, please follow the procedure below.

1. Press and the hold down the **VIDEO 1** button, then press the **STANDBY/ON** button when the unit is Power **ON**.
2. After "*Clear*" is displayed, the preset memory and each mode stored in the memory, are initialized and will return to the factory settings.

4. How to check version of microprocessor?

Main microprocessor Q7008.

1. Press and the hold down the DISPLAY button , then press the STANDBY/ON button when the unit is Power ON.
   Version is displayed on FL display only for 3 seconds.

   ex. *Version 04215A*

2. Press the STANDBY/ON button to Power Off.

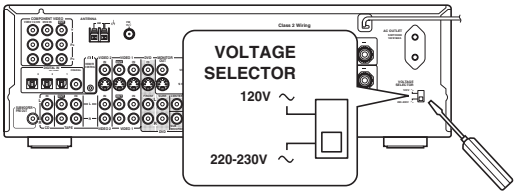
Sub microprocessor Q7502.
Check is impossible. (Unnecessary)

5. Memory backup

The TX-SR502/TX-SR502E uses a battery-less memory backup system in order to retain radio presets and other settings when it's unplugged or in the case of a power failure. Although no batteries are required, the TX-SR502/TX-SR502E must be plugged into an AC outlet in order to charge the backup system. (On non-American models, the TX-SR502/ TX-SR502E's POWER switch must be set to ON in order to charge the backup system.) Once it has been charged, the TX-SR502/TX-SR502E will retain the settings for several weeks, although this depends on the environment and will be shorter in humid climates.

6. Setting the voltage selector (Worldwide models only)

The Worldwide model has a voltage selector for compatibility with power systems around the world. Before you plug in this model, make sure that the voltage selector is set to the correct voltage for your area. If it isn't, use a small screwdriver to set it as appropriate. For example, if the voltage in your area is 120 volts, set the selector to "120V. " If it's between 220 and 230 volts, set it to "220-230V. "



SERVICE PROCEDURES-2

7. Changing the AM band step

1. Worldwide model (MWT).

You can select AM band step 9kHz or 10kHz by the following operation.

How to select?

Press and hold down the TUNER , then press the MEMORY.

2. Except worldwide model.

2-1. Necessary to change as follows.

R7003 Change to 10 kohms. (Refer to Fig-1)

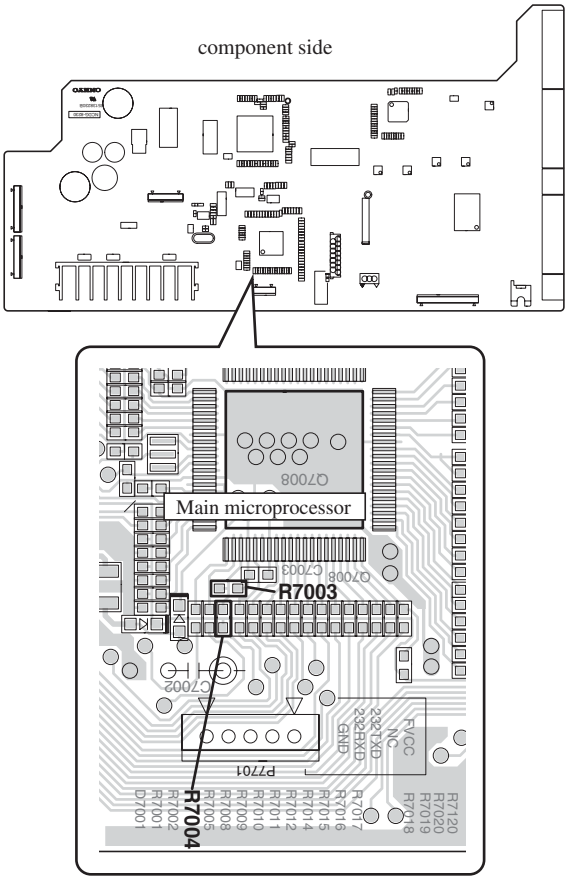
R7004 Change to 10 kohms. (Refer to Fig-1)

2-2. How to select?

Press and hold down the TUNER , then press the MEMORY.

Fig-1

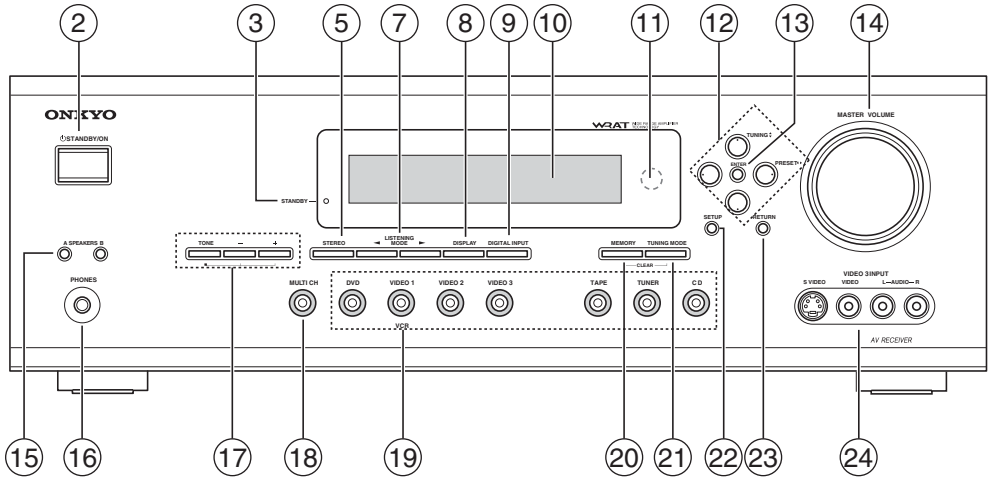
NADG-8230 (PREAMPLIFIER PC BOARD)



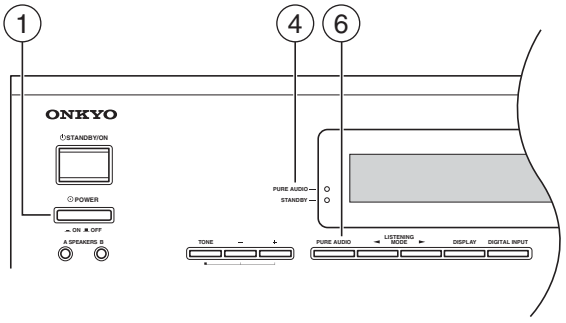
PANEL VIEWS-1

FRONT PANELS-1

American Models



Other Models



① POWER switch

The American model doesn't have this switch.
This is the main power switch. When set to OFF, the is completely shutdown.
When set to ON, the unit is inStandby mode and the STANDBY indicator lights up.
Don't turn on the power until you've completed, and double-checked all connections.

② STANDBY/ON button

This button is used to set the to On or Standby. For models with a POWER switch, this button has no effect unless the POWER switch is set to ON.

③ STANDBY indicator

This indicator lights up when the is in Standby mode, and it flashes while a signal is being received from the remote controller.

④ PURE AUDIO indicator

The American model doesn't have this indicator.
This indicator lights up when the Pure Audio listening mode is selected. (No video signals are output in this mode.)

⑤ STEREO button

This button is used to select the Stereo listening mode. (American model only)

⑥ PURE AUDIO button

The American model doesn't have this button.
This button is used to select the Pure Audio listening mode.

⑦ LISTENING MODE [◄] [►] buttons

These buttons are used to select the listening modes.

⑧ DISPLAY button

This button is used to display various information about the currently selected source.

⑨ DIGITAL INPUT button

This button is used to assign the digital inputs and to specify the format of digital input signals.

⑩ Display

PANEL VIEWS-2

FRONT PANELS-2

⑪ Remote control sensor

This sensor receives control signals from the remote controller.

⑫ Arrow buttons

These buttons are used to select and adjust settings.

TUNING [▲] [▼] buttons

These buttons are used to tune into radio stations.

PRESET [◄] [►] buttons

These buttons are used to select radio presets.

⑬ ENTER button

This button is used to confirm settings.

⑭ MASTER VOLUME control

This control is used to set the volume of the unit.

⑮ SPEAKER A & B buttons

These buttons are used to turn speaker sets A and B on and off.

⑯ PHONES jack

This 1/4-inch phone jack is for connecting a standard pair of stereo headphones for private listening.

⑰ TONE, [-] & [+] buttons

These buttons are used to adjust the bass and treble.

⑱ MULTI CH button

This button is used to select the multichannel DVD input.

⑲ Input selector buttons

These buttons are used to select the input sources.

⑳ MEMORY button

This button is used to preset radio stations.

㉑ TUNING MODE button

This button is used to select the Auto or Manual Tuning mode.

㉒ SETUP button

This button is used to access various settings.

㉓ RETURN button

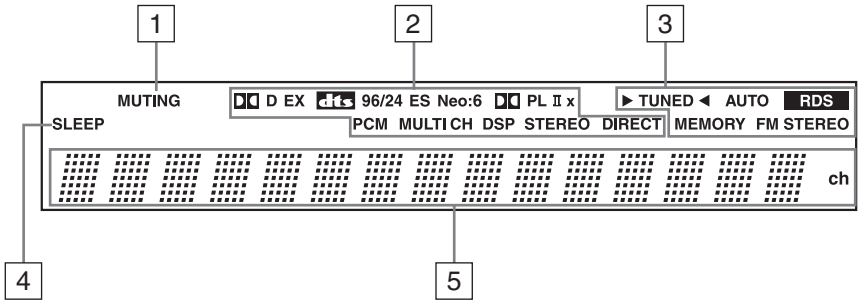
This button is used to return to the previous screen when changing settings.

㉔ VIDEO 3 INPUT

These S-Video, composite video, and analog audio inputs can be used to connect a camcorder or games console.

PANEL VIEWS-3

DISPLAY



1 MUTING indicator

This indicator flashes when the unit is muted.

2 Source/listening mode indicators

These indicators show the currently selected listening mode and digital audio format.

3 Tuning indicators

TUNED: This indicator lights up when the unit is tuned into a radio station.

AUTO: This indicator lights up when Auto Tuning is selected, and disappears when Manual Tuning is selected.

RDS (European model only): This indicator lights up when the TX-SR502E is tuned to a radio station that supports RDS (Radio Data System).

MEMORY: This indicator lights up when presetting radio stations.

FM STEREO: This indicator lights up when the unit is tuned to a stereo FM station.

4 SLEEP indicator

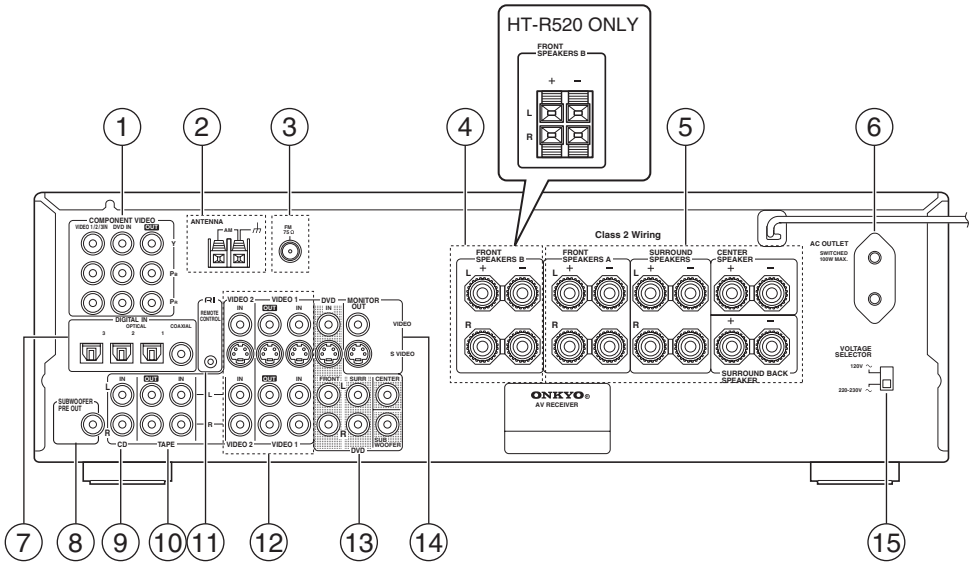
This indicator lights up when the Sleep function has been set.

5 Message area

This area of the display shows various information about the currently selected source.

PANEL VIEWS-4

REAR PANEL



1 COMPONENT VIDEO

A DVD player, TV, or other component that supports component video can be connected here.

2 AM ANTENNA

These push terminals are for connecting an AM antenna.

3 FM ANTENNA

This socket is for connecting an FM antenna.

4 FRONT SPEAKERS B

These terminal posts are for connecting speaker set B.

5 FRONT SPEAKERS A, SURROUND SPEAKERS, CENTER SPEAKER & SURROUND BACK SPEAKER

These terminal posts are for connecting speaker set A.

6 AC OUTLET

This switched AC outlet can be used to supply power to another component. The connector type depends on the country in which you purchased your unit.

7 DIGITAL IN OPTICAL 1, 2, 3 & COAXIAL

These optical and coaxial sockets can be used to connect a CD, DVD, or LD (laser disc) player and other components with digital audio outputs.

8 SUBWOOFER PRE OUT

A powered subwoofer can be connected here.

9 CD IN

These analog inputs can be used to connect a CD player with analog outputs.

10 TAPE IN/OUT

These analog inputs and outputs can be used to connect a cassette recorder, Mini Disc recorder, or other recorder with analog inputs and outputs.

11 RI

This RI (Remote Interactive) socket can be connected to the RI socket on another Onkyo component.
The unit's remotecontroller can then be used to control that component.
To use RI, you must make an analog audio connection (RCA) between the unit and the other component, even if they are connected digitally.

Note:
RI can only be used with Onkyo components.

12 VIDEO 1 IN/OUT & VIDEO 2 IN

The VIDEO 1 S-Video, composite video, and audio inputs and outputs can be used to connect a VCR.
The VIDEO 2 S-Video, composite video, and audio inputs can be used to connect another video source (e.g., cable TV, satellite TV, or a set-top box).

13 DVD IN/MULTI CH INPUT

The FRONT, SURR, CENTER, and SUBWOOFER inputs can be used to connect components with multiple analog audio outputs, including DVD players with individual 5.1-channel analog outputs. The S-Video or composite video input should be connected to a video output on the DVD player.

14 MONITOR OUT

The S-Video or composite video output should be connected to a video input on your TV or projector.

15 VOLTAGE SELECTOR (Worldwide model only)

This voltage selector provides compatibility with power systems around the world.

REMOTE CONTROLLERS-1

RC-567M/569M/570M

How to Use the Remote Controller

Including the unit, the remote controller can be used to control up to 10 different components, including Onkyo components connected via RI. The remote controller has a specific operating mode for use with each type of component. Modes are selected by using the nine REMOTE MODE buttons.

■ AMP/TUNER & TAPE Mode

In AMP/TUNER & TAPE mode you can control the unit and an Onkyo cassette recorder connected via RI.

■ DVD, CD, MD & CDR Modes

With these modes you can control an Onkyo DVD player, CD player, MiniDisc recorder, or CD recorder connected via RI (the remote controller should be pointed at the unit). By entering the appropriate remote control code, the DVD mode can also be used to control another manufacturer's DVD player and the [CD], [MD], and [CDR] mode buttons can also be used with other manufacturer fs components (e.g., DVD, TV, VCR, satellite or cable receiver).

■ TV, VCR, CABLE & SAT Modes

With these modes you can control a TV, VCR, cable receiver, and satellite receiver. You must enter the appropriate remote control code first.

1	**Use the REMOTE MODE -[AMP], [DVD], [CD], [MD], [CDR], [TV], [VCR], [CABLE], [SAT- buttons to select the modes.**
2	**Uses the buttons supported by that mode to control the component.** AMP/TUNER mode DVD mode CD mode MD/ CDR mode TAPE mode TV mode VCR/CABLE / SAT mode

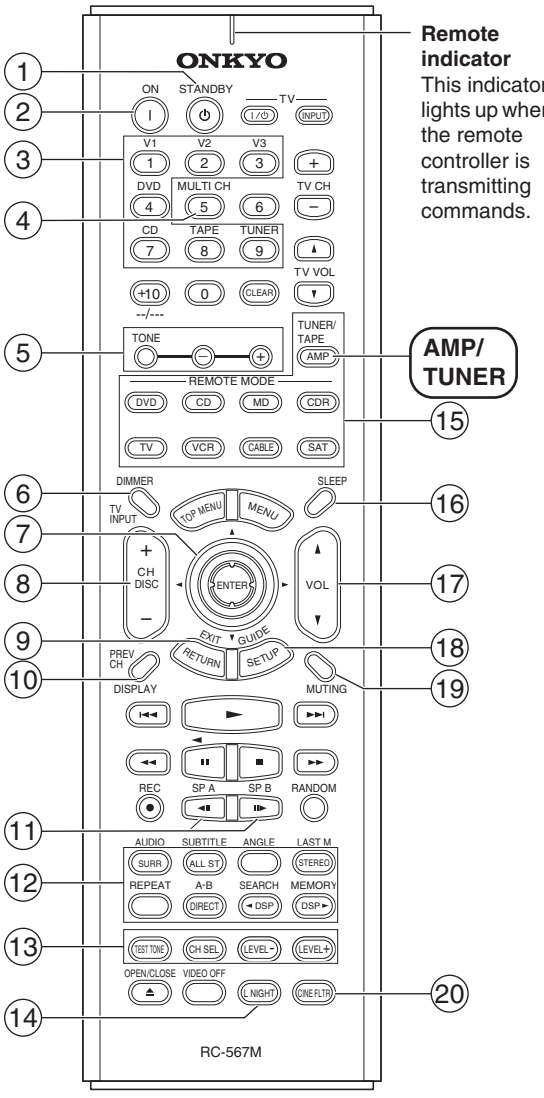
Note:

- Some of the functions described in this manual may not work as expected with other components.

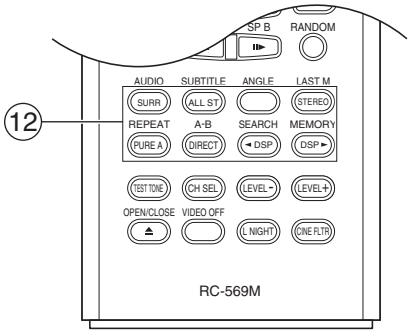
AMP/TUNER Mode

AMP/TUNER mode is used to control the unit.
To select AMP/TUNER mode, press the [AMP] mode button.

American model (RC-567M/570M)



Other models (RC-569M)



REMOTE CONTROLLERS-2

RC-567M/569M/570M

① STANDBY button

This button is used to set the unit to Standby.

② ON button

This button is used to turn on the unit.

③ Input selector buttons

These buttons are used to select the input sources.

④ MULTI CH button

This button is used to select the multichannel DVD input.

⑤ TONE, [-] & [+] buttons

These buttons are used to adjust the bass and treble.

⑥ DIMMER button

This button is used to adjust the display brightness.

⑦ Arrow [▲]/[▼]/[◄]/[►] & ENTER button

This button is used to select and adjust settings.

⑧ CH +/- button

This button is used to select radio presets.

⑨ RETURN button

This button is used to return to the previous screen when changing settings.

⑩ DISPLAY button

This button is used to display various information about the currently selected input source.

⑪ SP A & SP B buttons

These buttons are used to turn on and off speaker sets A and B.

⑫ Listening mode buttons

SURR button

This button is used to select the Dolby and DTS listening modes.

ALL ST button

This button is used to select the All Ch Stereo listening mode.

STEREO button

This button is used to select the Stereo listening mode.

PURE A button (not American model)

This button is used to select the Pure Audio listening mode. In this mode, the display and internal video circuitry are turned off, minimizing the possibility of interference, for a high fidelity sound that's true to the original. (No video signals are output in this mode.)

DIRECT button

This button is used to select the Direct listening mode.

[◄DSP] & [DSP►] buttons

These buttons are used to select the Onkyo original DSP (digital signal processor) listening modes.

⑬ TEST TONE, CH SEL, LEVEL- & LEVEL+ buttons

These buttons are used to adjust the level of each speaker individually.

⑭ L NIGHT button

This button is used to set the Late Night function.

⑮ REMOTE MODE buttons

These buttons are used to select the remote controller modes. When you use the remote controller, the mode button for the currently selected mode lights up.

⑯ SLEEP button

This button is used to set the Sleep function.

⑰ VOL button

This button is used to set the volume of the unit.

⑱ SETUP button

This button is used to access various settings.

⑲ MUTING button

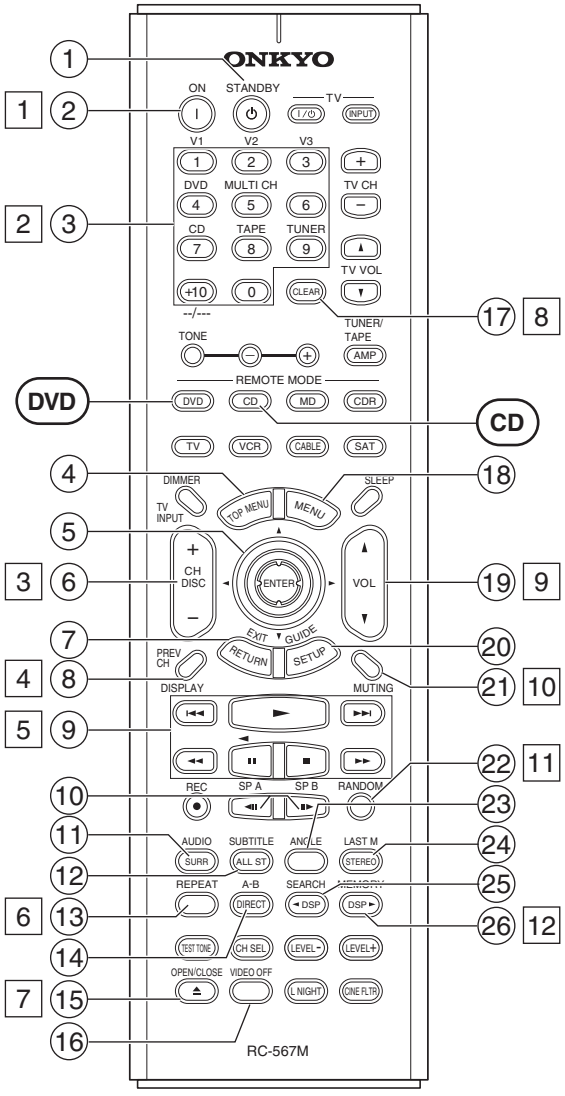
This button is used to mute the unit.

⑳ CINE FLTR button

This button is used to set the CinemaFILTER function.

REMOTE CONTROLLERS-3

RC-567M/569M/570M



DVD Mode

DVD mode is used to control an Onkyo DVD player connected to the unit via .

To set the remote controller to DVD mode, press the [DVD] mode button.

Before selecting DVD mode and starting playback, you should press the [AMP] mode button followed by the [DVD] input selector button to select your DVD player as the input source.

(1) STANDBY button

This button is used to set the DVD player to Standby.

(2) ON button

This button is used to turn on the DVD player and set it to Standby.

(3) Number buttons

These buttons are used to enter title, chapter, and track numbers and to enter times for locating specific points in time.

(4) TOP MENU button

This button is used to select a DVD's top menu.

(5) Arrow [▲]/[▼]/[◄]/[►] & ENTER button

This button is used to navigate DVD menus and the DVD player's onscreen setup menus.

(6) DISC +/- button

This button selects discs on a DVD changer.

(7) RETURN/EXIT button

This button is used to exit the DVD player's onscreen setup menu and to restart menu playback.

(8) DISPLAY button

This button is used to display information about the current disc, title, chapter, or track on the DVD player's display, including the elapsed time, remaining time, total time, and so on.

(9) Playback buttons

From left to right: Previous, Play, Next, Fast Reverse, Pause, Stop, and Fast Forward.

(10) Step & Slow [◄II]/[II►] buttons

These buttons are used for frame-by-frame playback and slow-motion playback.

(11) AUDIO button

This button is used to select foreign language soundtracks and audio formats (e.g., Dolby Digital or DTS).

(12) SUBTITLE button

This button is used to select subtitles.

(13) REPEAT button

This button is used to set the repeat playback functions.

REMOTE CONTROLLERS-4

RC-567M/569M/570M

⑭ A-B button

This button is used to set the A-B repeat playback function.

⑮ OPEN/CLOSE [⏏] button

This button is used to open and close the disc tray.

⑯ VIDEO OFF button

This button is used to turn off the internal video circuitry, eliminating the possibility of interference when playing audio-only discs.

⑰ CLEAR button

This button is used to cancel functions and to clear entered numbers.

⑱ MENU button

This button is used to display a DVD's menu.

⑲ VOL button

This button is used to set the volume of the unit.

⑳ SETUP/GUIDE button

This button is used to access the DVD player's onscreen setup menus.

㉑ MUTING button

This button is used to mute the unit.

㉒ RANDOM button

This button is used with the random playback function.

㉓ ANGLE button

This button is used to select different camera angles.

㉔ LAST M button

This button is used with the last memory function, which allows you to resume DVD playback from where you left off.

㉕ SEARCH button

This button is used to search for titles, chapters, tracks, and specific points in time.

㉖ MEMORY button

This button is used with the memory playback function, which allows you to create a custom playlist of titles, chapters, or tracks.

CD Mode

CD mode is used to control an Onkyo CD player connected to the unit via RI.

To set the remote controller to CD mode, press the [CD] mode button.

Before selecting CD mode and starting playback, you should press the [AMP] mode button followed by the [CD] input selector button to select your CD player as the input source.

1 ON button

This button is used to set the CD player to On or Standby.

2 Number buttons

These buttons are used to enter track numbers and to enter times for locating specific points in time.

3 DISC button

This button is used to select discs on a CD changer.

4 DISPLAY button

This button is used to display information about the current disc or track on the CD player's display, including the elapsed time, remaining time, total time, and so on.

5 Playback buttons

From left to right: Previous, Play, Next, Fast Reverse, Pause, Stop, and Fast Forward.

6 REPEAT button

This button is used to set the repeat playback functions.

7 OPEN/CLOSE [⏏] button

This button is used to open and close the disc tray.

8 CLEAR button

This button is used to cancel functions and to clear entered numbers.

9 VOL button

This button is used to set the volume of the unit.

10 MUTING button

This button is used to mute the unit.

11 RANDOM button

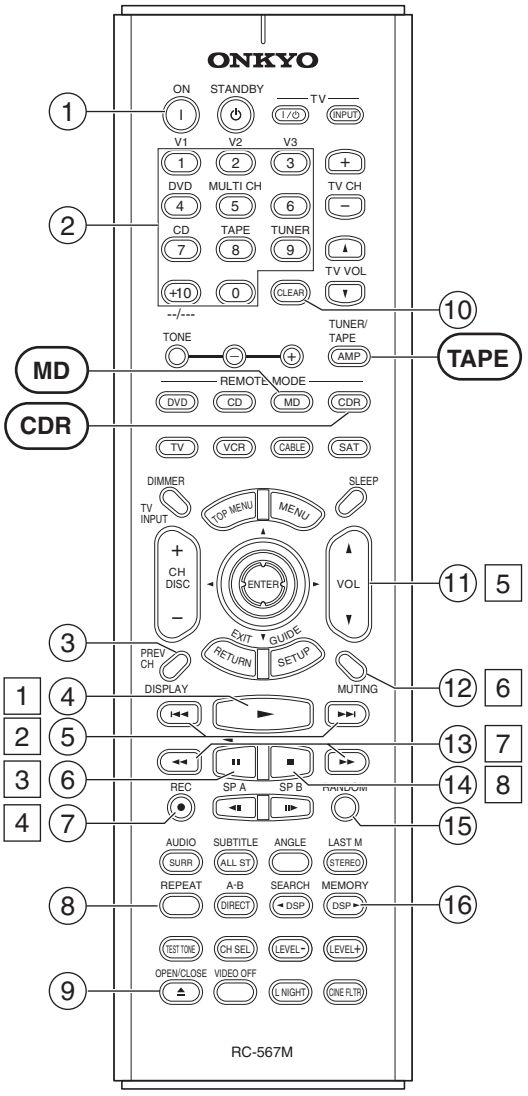
This button is used with the random playback function.

12 MEMORY button

This button is used with the memory playback function, which allows you to create a custom playlist of tracks.

REMOTE CONTROLLERS-5

RC-567M/569M/570M



MD Mode & CDR Mode

MD mode is used to control an Onkyo MiniDisc recorder connected to the unkt via RI. CDR mode is used to control an Onkyo CD recorder connected to the unit via RI.

To select MD mode, press the [MD] mode button. To select CDR mode, press the [CDR] mode button.

Before selecting MD or CDR mode and starting playback, you should press the [AMP] mode button followed by the [TAPE] input selector button to select your MiniDisc or CD recorder as the input source.

(1) ON button

This button is used to set the MiniDisc recorder or CD recorder to On or Standby.

(2) Number buttons

These buttons are used to enter track numbers and to enter times for locating specific points in time.

(3) DISPLAY button

This button is used to display information about the current disc or track on the MD/CDR recorder's display, including the elapsed time, remaining time, total time, and so on.

(4) Play [►] button

This button is used to start playback.

(5) Previous & Next [|◄◄]/[►►|] buttons

The Previous [|◄◄] button is used to select the previous track. During playback it selects the beginning of the current track.
The Next [►►|] button is used to select the next track.

(6) Pause [❙❙] button

This button is used to pause playback.

(7) REC [●] button

This button is used to start recording.

(8) REPEAT button

This button is used to set the repeat playback functions.

(9) OPEN/CLOSE [▲] button

This button is used to eject the MiniDisc or open and close the disc tray of the CD recorder.

(10) CLEAR button

This button is used to cancel functions and to clear entered numbers.

(11) VOL button

This button is used to set the volume of the unit.

(12) MUTING button

This button is used to mute the unit.

REMOTE CONTROLLERS-6

RC-567M/569M/570M

⑬ FR & FF [◄◄]/[►►] buttons

The FR [◄◄] button is used to start fast reverse. The FF [►►] button is used to start fast forward.

⑭ Stop [■] button

This button is used to stop playback.

⑮ RANDOM button

This button is used with the random playback function.

⑯ MEMORY button

This button is used with the memory playback function, which allows you to create a custom playlist of tracks.

Tape Mode

Tape mode is used to control an Onkyo cassette recorder connected to the unit via RI.

To set the remote controller to Tape mode, press the [AMP] mode button.

Before selecting TAPE mode and starting playback, you should press the [AMP] mode button followed by the [TAPE] input selector button to select your cassette recorder as the input

1 Play [►] button

This button is used to start playback.

2 Previous & Next [I◄◄]/[►►I] buttons

The Previous [I◄◄] button is used to select the previous track. During playback it selects the beginning of the current track.
The Next [►►I] button is used to select the next track.
The Previous and Next [I◄◄]/[►►I] buttons may not work properly with some cassette tapes depending on how they were recorded.

3 Reverse Play [◄] button

This button is used to start reverse playback.

4 REC [●] button

This button is used to start recording.

5 VOL button

This button is used to set the volume of the unit.

6 MUTING button

This button is used to mute the unit.

7 Rewind & FF [◄◄]/[►►] buttons

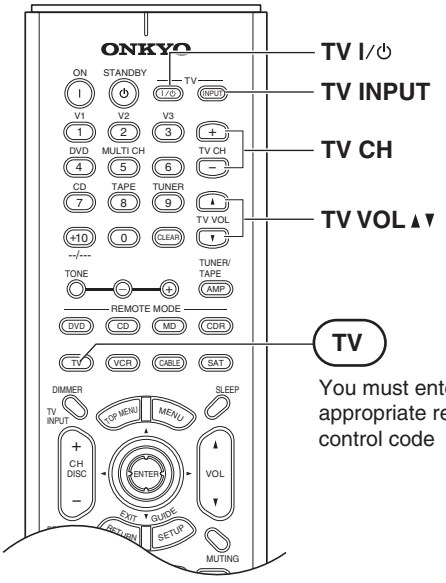
The Rewind [◄◄] button is used to start rewind. The FF [►►] button is used to start fast forward.

8 Stop [■] button

This button is used to stop playback.

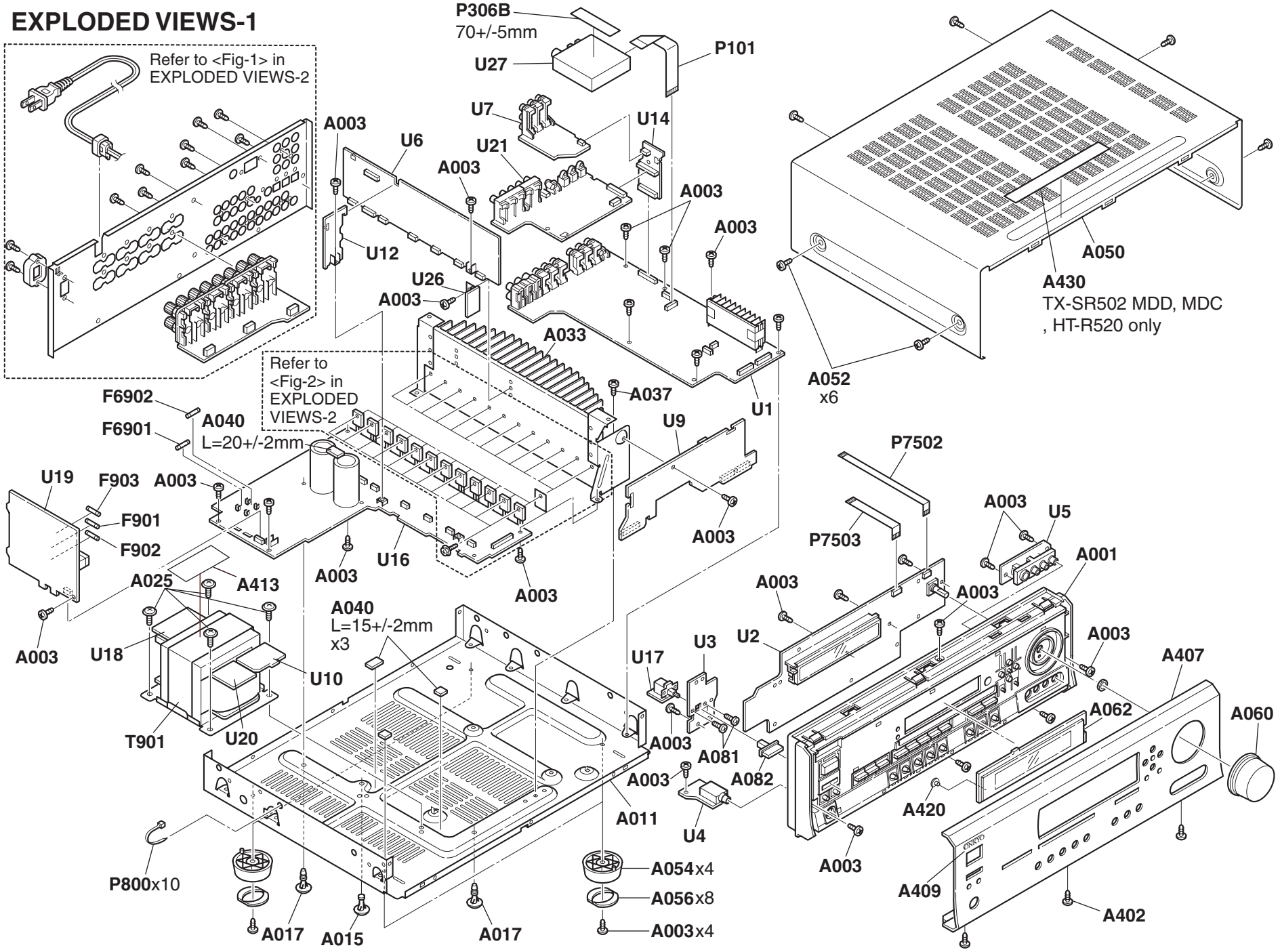
TV Control Buttons

The remote controller has dedicated buttons for controlling a TV, which can be used regardless of which remote controller mode is currently selected. To use these buttons, you must first program the [TV] mode button with the appropriate remote control code for your TV.



TV [⏻/I]	Set the TV to On or Standby
TV CH [+]/[-]	Selects channels on the TV
[TV INPUT]	Selects the TV's VCR input
TV VOL [▲]/[▼]	Adjusts the TV's volume

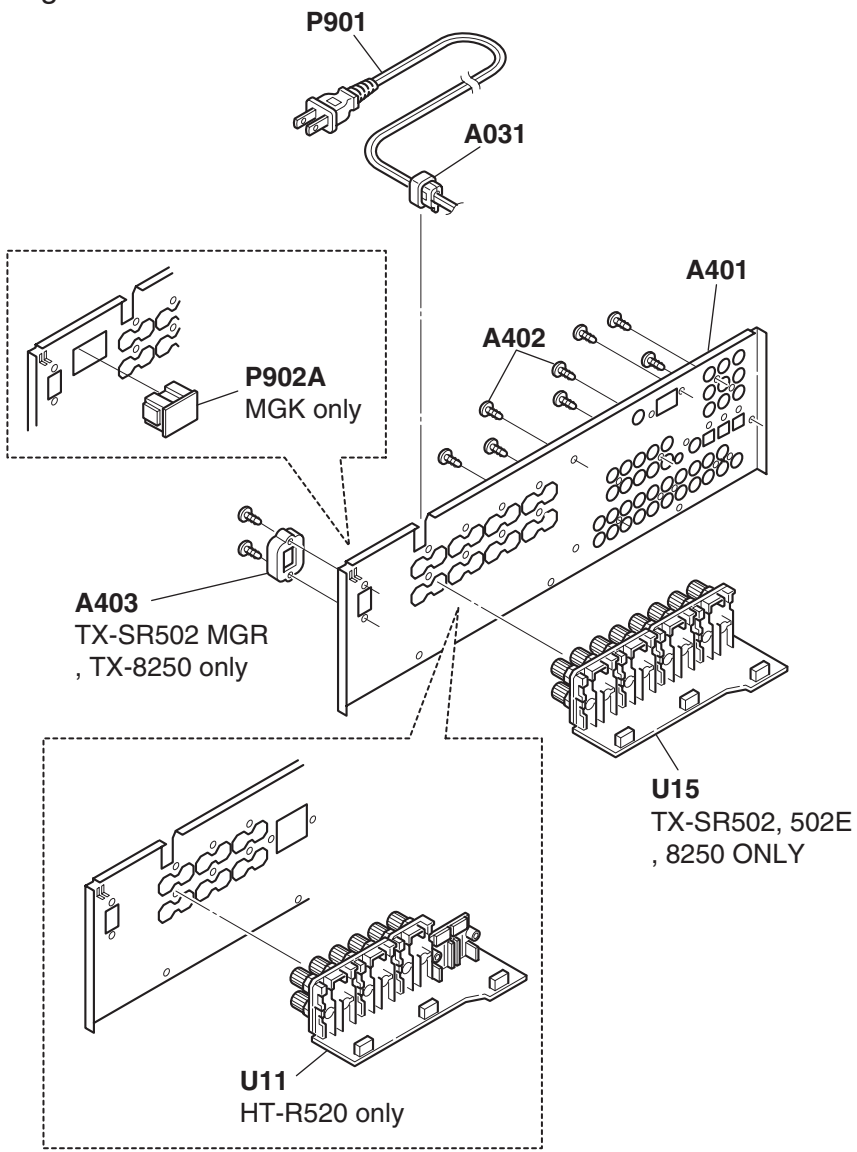
EXPLODED VIEWS-1



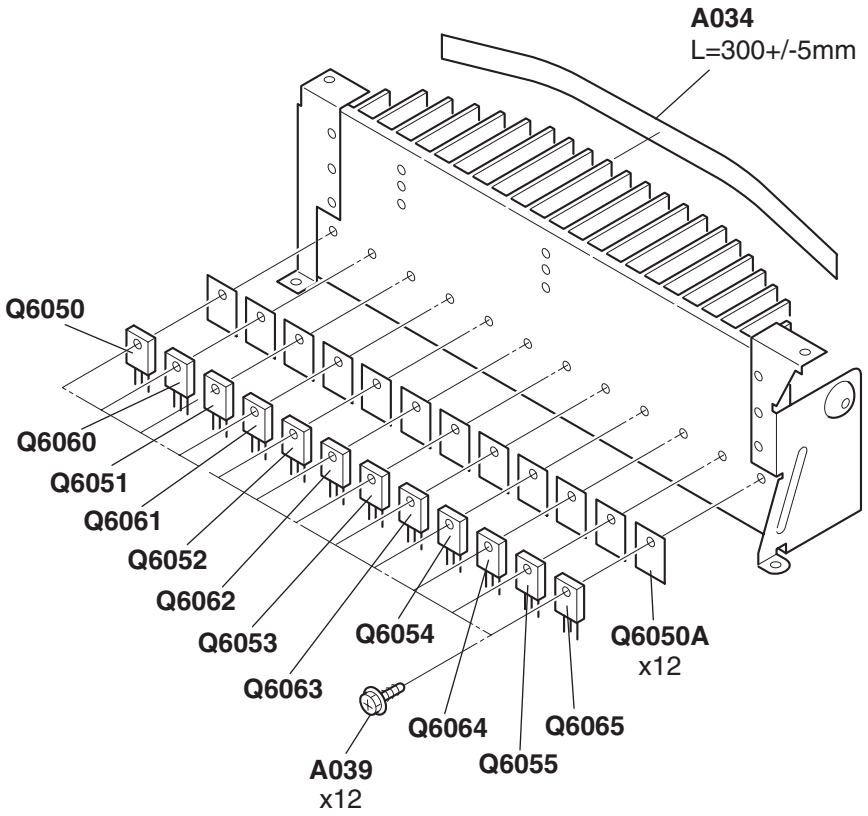
EXPLODED VIEWS-2

POWER TRANSISTOR & REAR PANEL SECTION

<Fig-1>



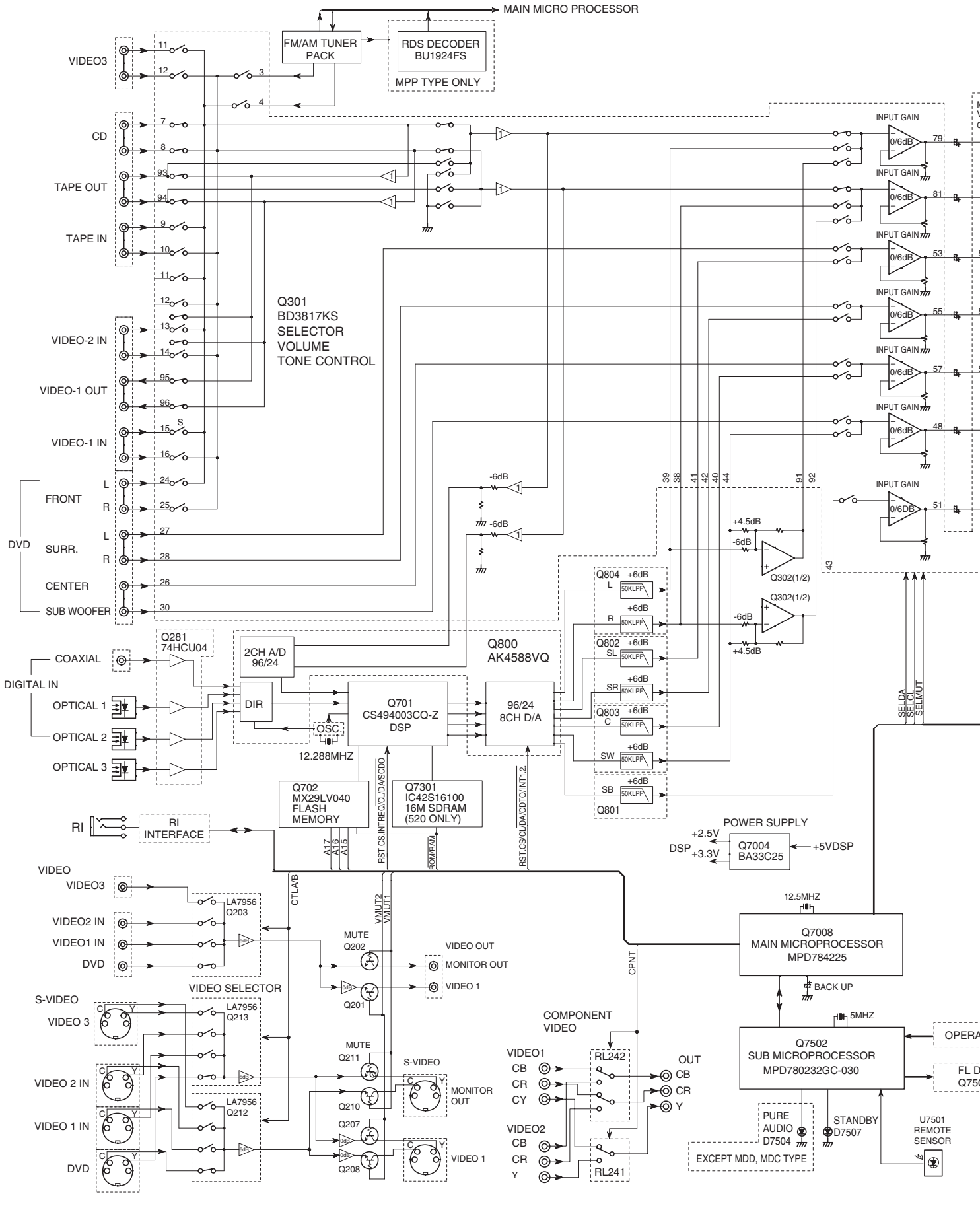
<Fig-2>



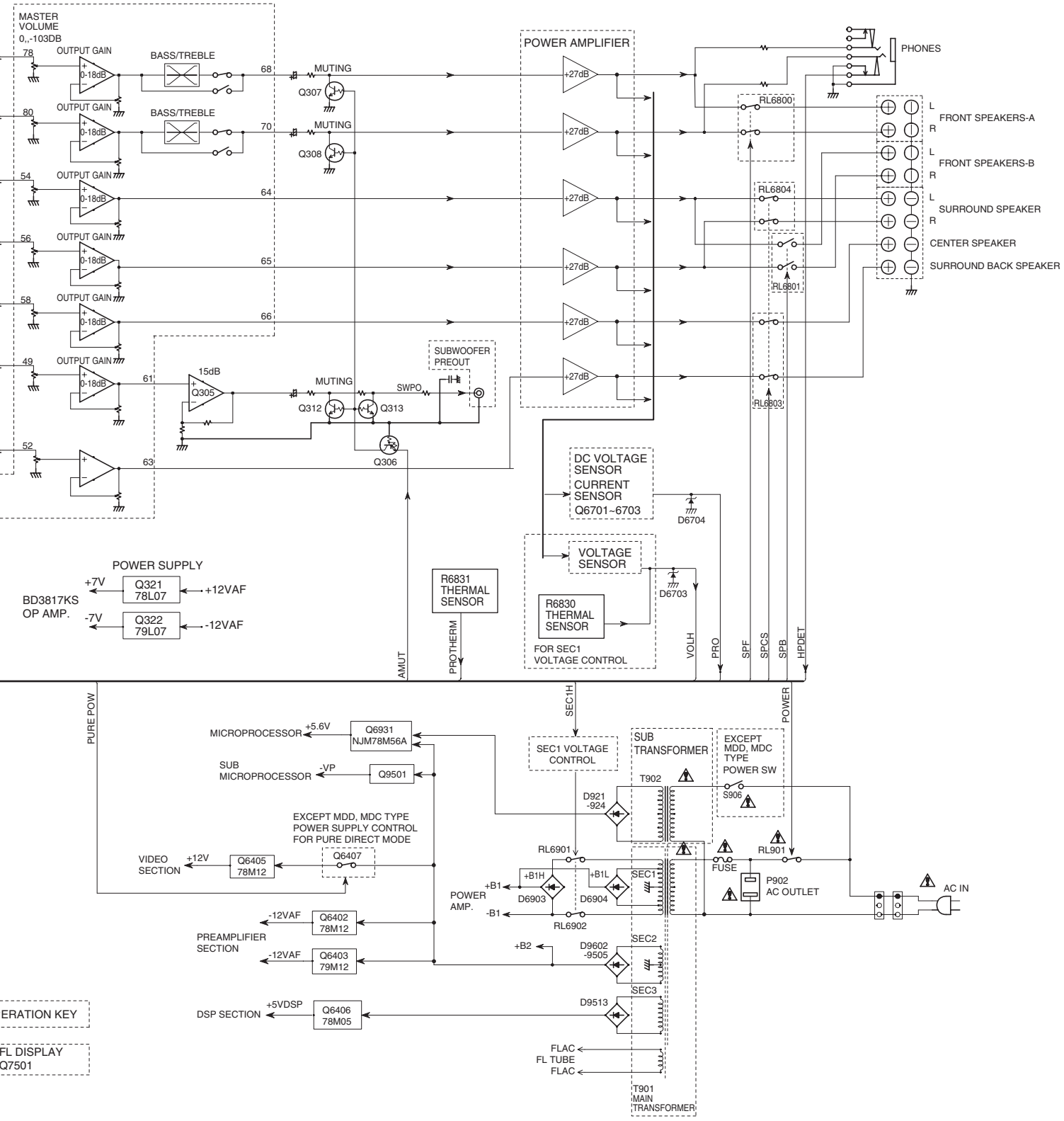
A B C D

1 2 3 4 5

BLOCK DIAGRAM



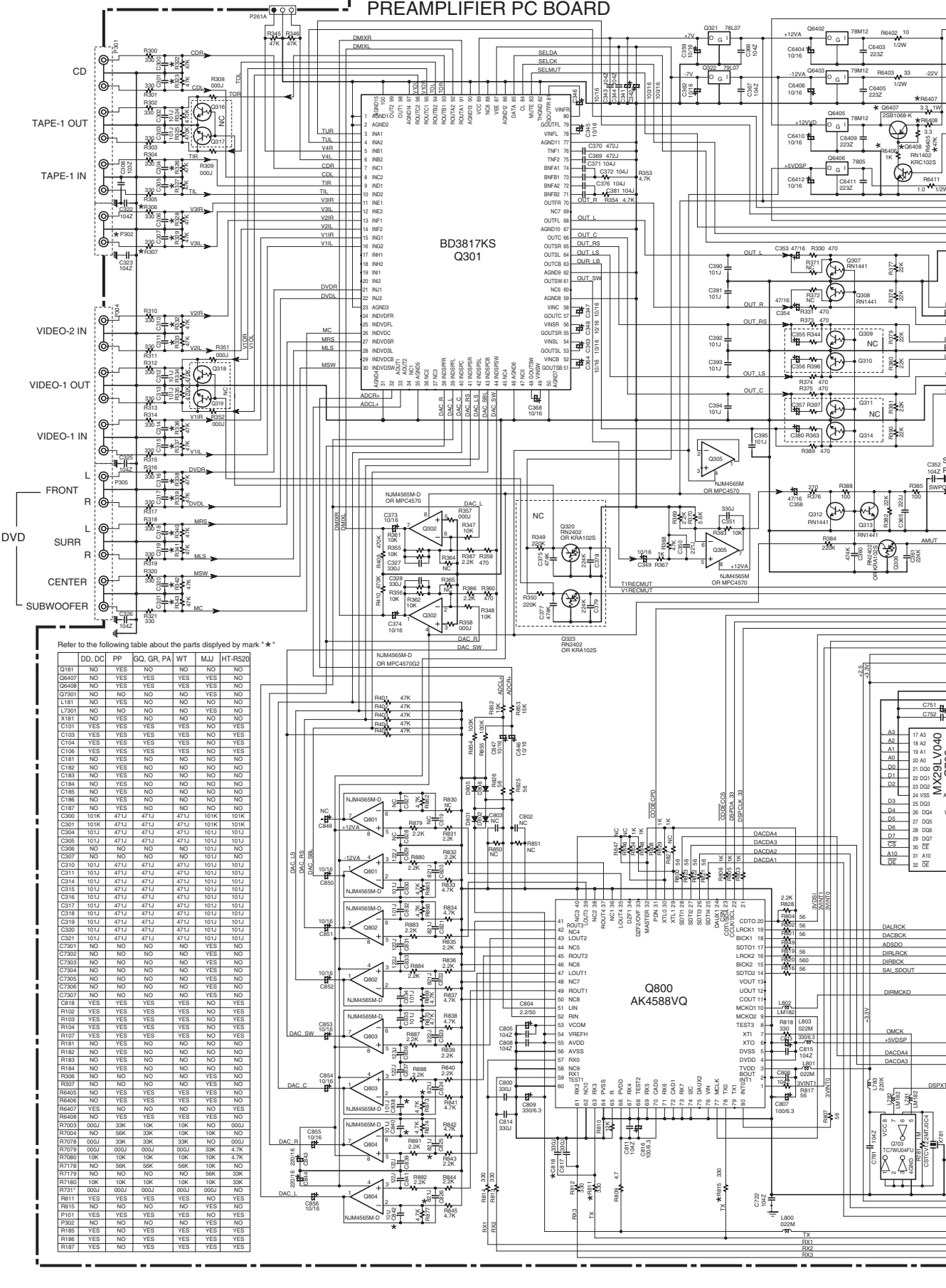
E F G H


MASTER VOLUME 0,,-103DB
OUTPUT GAIN
0-18dB
BASS/TREBLE
MUTING
Q307
Q308
POWER AMPLIFIER
+27dB
PHONES
RL6800
RL6804
RL6801
RL6803
L
R
FRONT SPEAKERS-A
FRONT SPEAKERS-B
SURROUND SPEAKER
CENTER SPEAKER
SURROUND BACK SPEAKER
SUBWOOFER PREOUT
15dB
Q305
SWPO
Q312
Q313
Q306
DC VOLTAGE SENSOR
CURRENT SENSOR
Q6701~6703
D6704
VOLTAGE SENSOR
D6703
R6831 THERMAL SENSOR
R6830 THERMAL SENSOR
FOR SEC1 VOLTAGE CONTROL
POWER SUPPLY
BD3817KS OP AMP.
+7V
Q321 78L07
+12VAF
-7V
Q322 79L07
-12VAF
AMUT
PROTHERM
VOLH
PRO
SPF
SPCS
SPB
HPDET
PURE POW
SEC1H
POWER
MICROPROCESSOR
+5.6V
Q6931 NJM78M56A
SUB MICROPROCESSOR
-VP
Q9501
SEC1 VOLTAGE CONTROL
SUB TRANSFORMER
EXCEPT MDD, MDC TYPE POWER SW
T902
S906
D921 -924
EXCEPT MDD, MDC TYPE POWER SUPPLY CONTROL FOR PURE DIRECT MODE
Q6407
VIDEO SECTION
+12V
Q6405 78M12
RL6901
FUSE
P902 AC OUTLET
AC IN
+B1H
+B1L
SEC1
D6903
D6904
+B1
-B1
POWER AMP.
RL6902
-12VAF
Q6402 78M12
PREAMPLIFIER SECTION
-12VAF
Q6403 79M12
+B2
D9602 -9505
SEC2
SEC3
D9513
DSP SECTION
+5VDSP
Q6406 78M05
FLAC
FL TUBE
FLAC
T901 MAIN TRANSFORMER
ERATION KEY
FL DISPLAY Q7501

A B C D

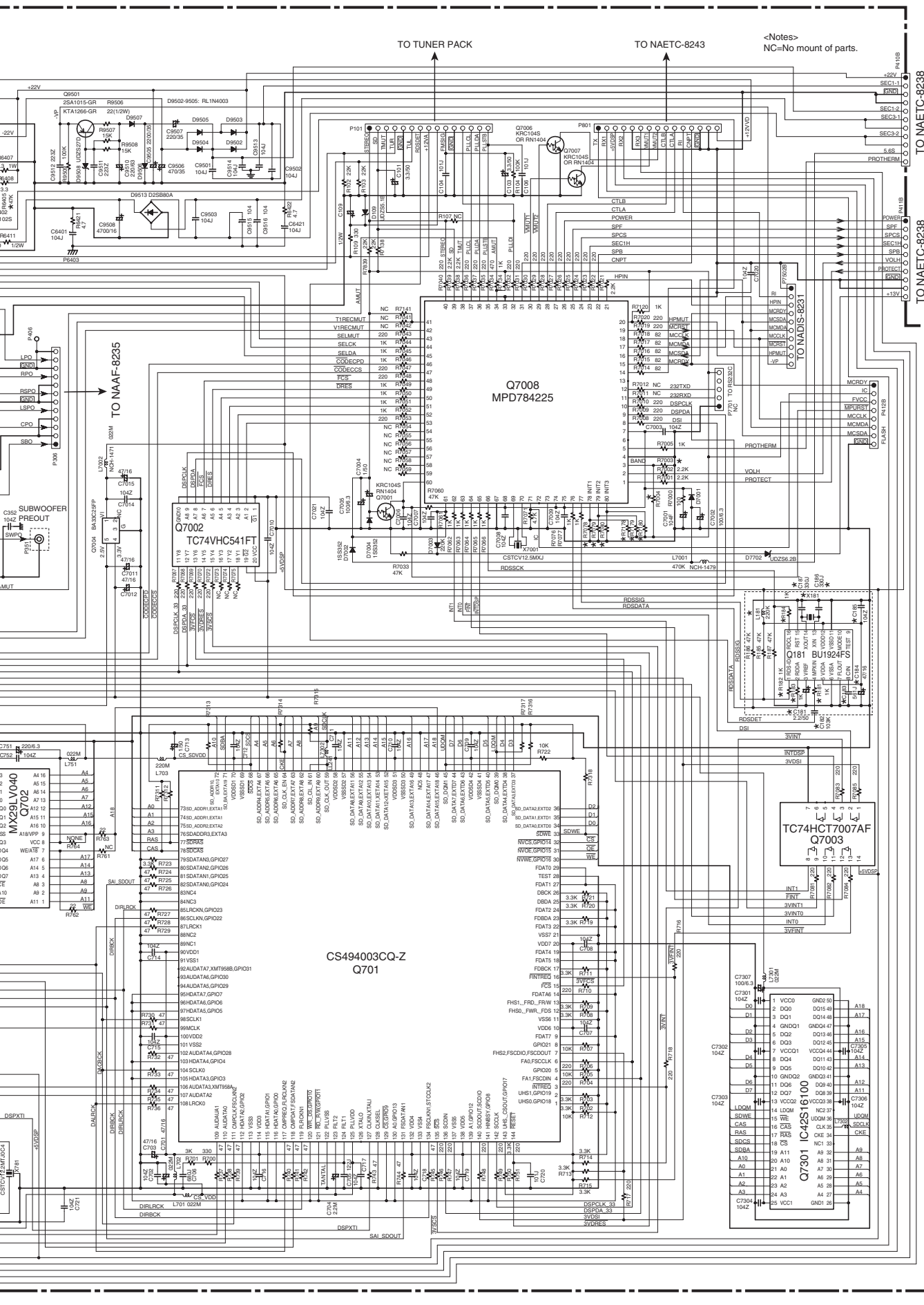
SCHEMATIC DIAGRAMS-1
PREAMPLIFIER SECTION

U01
NADG-8230
PREAMPLIFIER PC BOARD



Refer to the following table about the parts displyed by mark "★"

	DD, DC	PP	GQ, GR, PA	WT	MJJ	HT-R520
Q181	NO	YES	NO	NO	NO	NO
Q6407	NO	YES	YES	YES	YES	NO
Q6408	NO	YES	YES	YES	YES	NO
Q7301	NO	NO	NO	NO	YES	NO
L181	NO	YES	NO	NO	NO	NO
L7301	NO	NO	NO	NO	YES	NO
X181	NO	YES	NO	NO	NO	NO
C101	YES	YES	YES	YES	NO	YES
C103	YES	YES	YES	YES	NO	YES
C104	YES	YES	YES	YES	NO	YES
C106	YES	YES	YES	YES	NO	YES
C181	NO	YES	NO	NO	NO	NO
C182	NO	YES	NO	NO	NO	NO
C183	NO	YES	NO	NO	NO	NO
C184	NO	YES	NO	NO	NO	NO
C185	NO	YES	NO	NO	NO	NO
C186	NO	YES	NO	NO	NO	NO
C187	NO	YES	NO	NO	NO	NO
C300	101K	471J	471J	471J	101K	101K
C301	101K	471J	471J	471J	101K	101K
C304	101J	471J	471J	471J	101J	101J
C305	101J	471J	471J	471J	101J	101J
C306	NO	NO	NO	NO	101J	NO
C307	NO	NO	NO	NO	101J	NO
C310	101J	471J	471J	471J	101J	101J
C311	101J	471J	471J	471J	101J	101J
C314	101J	471J	471J	471J	101J	101J
C315	101J	471J	471J	471J	101J	101J
C316	101J	471J	471J	471J	101J	101J
C317	101J	471J	471J	471J	101J	101J
C318	101J	471J	471J	471J	101J	101J
C319	101J	471J	471J	471J	101J	101J
C320	101J	471J	471J	471J	101J	101J
C321	101J	471J	471J	471J	101J	101J
C7301	NO	NO	NO	NO	YES	NO
C7302	NO	NO	NO	NO	YES	NO
C7303	NO	NO	NO	NO	YES	NO
C7304	NO	NO	NO	NO	YES	NO
C7305	NO	NO	NO	NO	YES	NO
C7306	NO	NO	NO	NO	YES	NO
C7307	NO	NO	NO	NO	YES	NO
C818	YES	YES	YES	YES	NO	YES
R102	YES	YES	YES	YES	NO	YES
R103	YES	YES	YES	YES	NO	YES
R104	YES	YES	YES	YES	NO	YES
R167	YES	YES	YES	YES	NO	YES
R181	NO	YES	NO	NO	NO	NO
R182	NO	YES	NO	NO	NO	NO
R183	NO	YES	NO	NO	NO	NO
R184	NO	YES	NO	NO	NO	NO
R306	NO	NO	NO	YES	NO	NO
R307	NO	NO	NO	YES	NO	NO
R6405	NO	YES	YES	YES	NO	NO
R6406	NO	YES	YES	YES	NO	NO
R6407	YES	NO	NO	NO	NO	YES
R6408	NO	YES	YES	YES	NO	NO
R7003	000J	33K	10K	10K	NO	000J
R7004	NO	56K	33K	10K	10K	NO
R7078	000J	33K	33K	33K	NO	000J
R7079	000J	000J	000J	000J	33K	4.7K
R7080	10K	10K	10K	10K	10K	4.7K
R7178	NO	56K	56K	56K	10K	NO
R7179	NO	NO	NO	NO	56K	33K
R7180	10K	10K	10K	10K	10K	33K
R731*	000J	000J	000J	000J	000J	NO
R811	YES	YES	YES	YES	NO	YES
R815	NO	NO	NO	NO	YES	NO
P101	YES	YES	YES	YES	NO	YES
P302	NO	NO	NO	NO	YES	NO
R185	YES	NO	YES	YES	YES	YES
R186	YES	NO	YES	YES	YES	YES
R187	YES	NO	YES	YES	YES	YES


E
F
G
H
TO TUNER PACK
TO NAETC-8243
<Notes>
NC=No mount of parts.
TO NAETC-8238
TO NADIS-8231
TO NAAF-8235
Q7008
MPD784225
Q7002
TC74VHC541FT
Q7001
CS494003CQ-Z
Q701
Q7003
TC74HCT7007AF
Q702
MX29LV040
Q7007
KRC104S
OR RN1404
Q7006
KRC104S
OR RN1404
Q9501
2SA1015-GR
KTA1266-GR
D9502-9505: RL1N4003
D9513 D2SB80A
Q7004
BA3C25FP
SUBWOOFER
PREOUT
Q181 BU1924FS
Q7307
IC42S16100
Q7301
104Z
TO TUNER PACK
TO NAETC-8243
TO NADIS-8231
TO NAAF-8235
TO NAETC-8238

A B C D

SCHEMATIC DIAGRAMS-2

DISPLAY SECTION

NADIS-8231

U02
DISPLAY PC
BOARD

NOTE

- THE COMPONENTS IDENTIFIED BY MARK ⚠ ARE CRITICAL FOR SAFETY REPLACE ONLY WITH PART NUMBER SPECIFIED
- VOLTAGE (MEASURED WITH VOLTMETER) ⟨ ⟩ IS DC VOLTAGE.(NO INPUT SIGNAL)
- ALL PNP TRANSISTORS ARE EQUIVALENT TO 2SA1015-GR UNLESS OTHERWISE NOTED.
- ALL NPN TRANSISTORS ARE EQUIVALENT TO 2SC1815-GR UNLESS OTHERWISE NOTED.
- ALL DIODES ARE EQUIVALENT TO 1SS133 UNLESS OTHERWISE NOTED.
- ELECTROLYTIC CAPACITORS ( ) ARE IN u F/WV.
- ALL CAPACITORS ARE IN pF/50WV UNLESS OTHERWISE NOTED.
  EX) 030› 3pF 330› 33pF 331› 330pF 333› 0.033uF
- ALL RESISTORS ARE IN OHMS 1/4WATTS UNLESS OTHERWISE NOTED.
- THE THICK LINES ON PC BOARD ARE THE PRINTING SIDE OF THE PARTS.
  EX) PRINTING SIDE
- CIRCUIT IS SUBJECT TO CHANGE FOR IMPROVEMENT.
- ⁄ IS DC VOLTAGE, AT NO INPUT SIGNAL.

<Notes>
NC=No mount of parts.

Q7501 HNA-16MM39T

R7581 100k X 14
NC

R7582
NC
100K X 13

Q7502
UPD780232GC-030

Q7504
RN2403
KRA103S

D7502
UDZ5.1B

D7503
1SS352

SYSOUT

R7505
220K

R7506 4.7K
R7507 4.7K

C7507
104Z

R7532
10K

22:ANI0
21:ANI1

41:P45/FIP37
42:P44/FIP36
43:P43/FIP35

61:FIP19

U7501
PIC-3704TH2

D7504
PURE AUDIO

C7514 100/6.3
C7517 102J
R7513 220

R7514 4.7K
Q7507
RN1402
KRC102S

MASTER VOLUME
S7501
C7516 104Z
C7515 104Z

R7531 220
D7505
STANDBY

Q7506
RN1402
KRC102S

SYSIN
K3 K2 K1 K0

STBYLED
VAJ
VBJ

SBMLDY SBMDI SBMDO SBMCLK SBMRST

U03
OPERATION
SWITCH
PC BOARD
NASW-8232

S7617 SP A
S7616 SP B
S7615 STANDBY
JL7501B
JL7501A
GND
KEY0
R7617 2.2K
R7616 1.2K
R7615 820

S7611
MDD, MDC TYPE --- STEREO
EXCEPT MDD, MDC TYPE --- PURE AUDIO

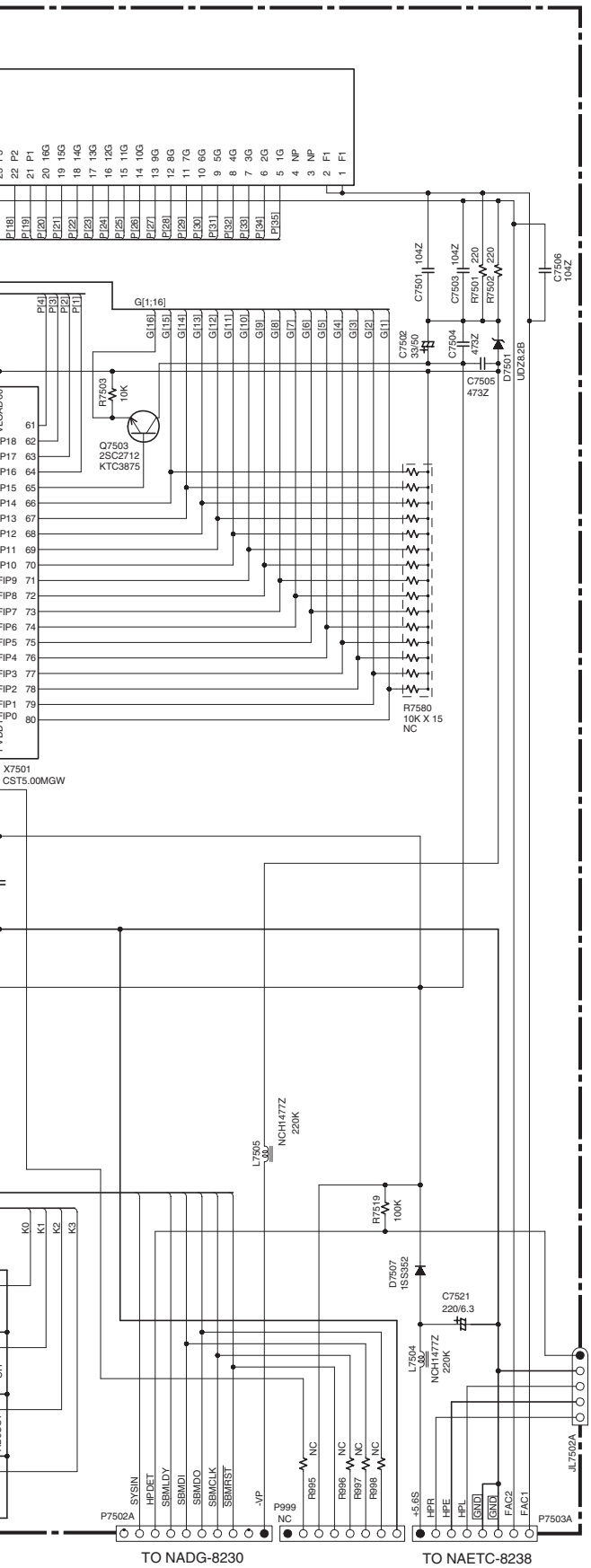
S7614 TONE R7613 560
S7613 TONE- R7612 470
S7612 TONE+ R7611 330
S7611

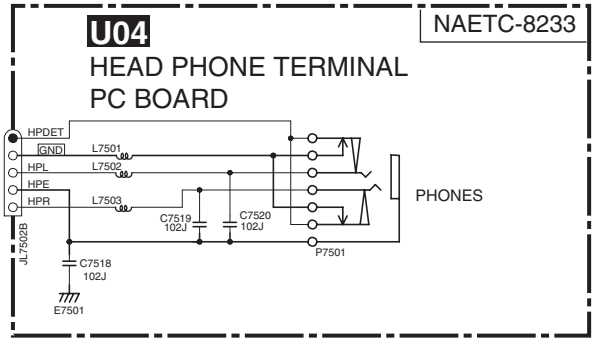
S7627 MEMORY R7626 2.2K
S7626 ---
S7625 DIGITAL INPUT R7625 1.2K
S7624 DISPLAY R7624 820
S7623 LISTEN MODE- R7623 560
S7622 LISTEN MODE+ R7622 470
S7621 MULTI CH R7621 330

S7638 FM MODE R7637 3.9K
S7637 CD R7636 2.2K
S7636 TUNER R7635 1.2K
S7635 TAPE R7634 820
S7634 VIDEO3 R7633 560
S7633 VIDEO2 R7632 470
S7632 VIDEO1 R7631 330
S7631 DVD ADJUST

S7647 SET UP R7646 2.2K
S7646 RETURN R7645 1.2K
S7645 TUNING< R7644 820
S7644 TUNING> R7643 560
S7643 ENTER R7642 470
S7642 PRESET< R7641 330
S7641 PRESET>

E F G H


G[1;16]
C7501 104Z
C7503 104Z
R7501 220
R7502 220
C7506 104Z
C7502 33/50
C7504 473Z
D7501 UDZ8.2B
C7505 473Z
R7503 10K
Q7503 2SC2712 KTC3875
R7580 10K X 15 NC
X7501 CST5.00MGW
L7505 NCH1477Z 220K
R7519 100K
D7507 1SS352
C7521 220/6.3
L7504 NCH1477Z 220K
K0
K1
K2
K3
SYSIN
HPDET
SBMLDY
SBMDI
SBMDO
SBMCLK
SBMRST
-VP
R995 NC
R996 NC
R997 NC
R998 NC
+5.6S
HPR
HPE
HPL
GND
GND
FAC2
FAC1
P7502A
P999 NC
P7503A
JL7502A
TO NADG-8230
TO NAETC-8238


U04
HEAD PHONE TERMINAL
PC BOARD
NAETC-8233
HPDET
GND
HPL
HPE
HPR
L7501
L7502
L7503
C7519 102J
C7520 102J
C7518 102J
E7501
P7501
PHONES
JL7502B

A B C D

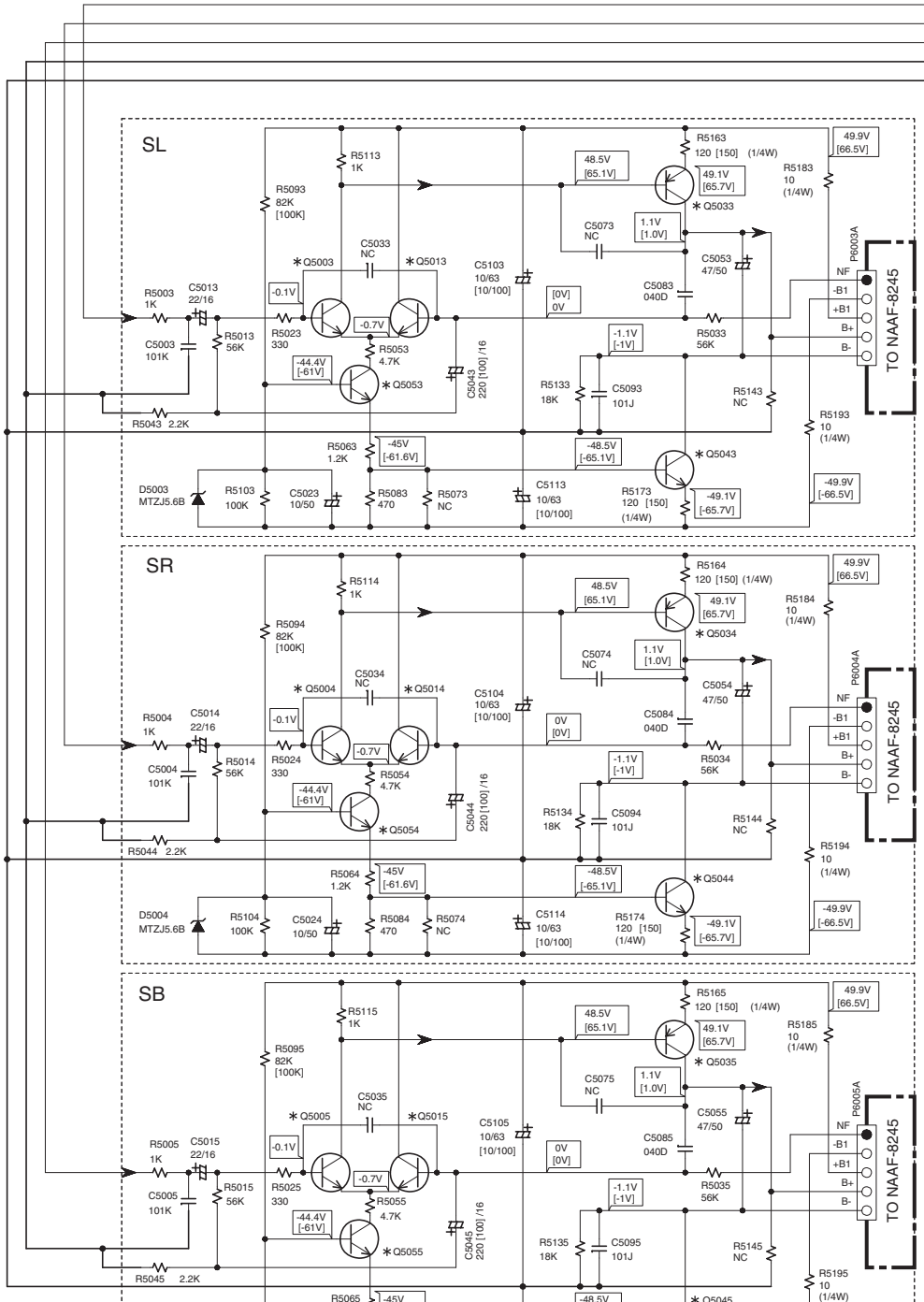
SCHEMATIC DIAGRAMS-3

DRIVER AMPLIFIER SECTION

NAAF-8235

U06

DRIVER AMPLIFIER PC BOARD



NOTE

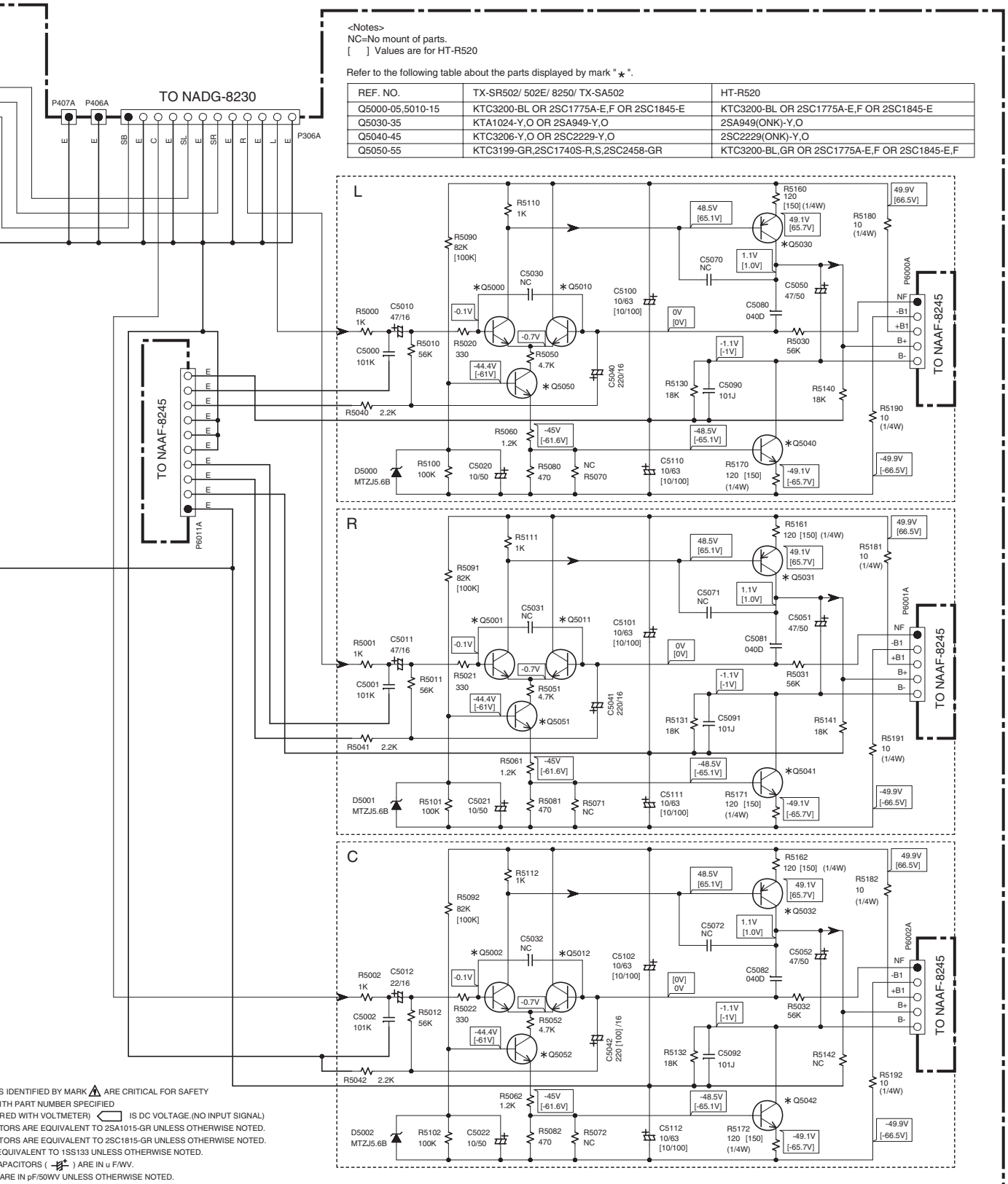
- THE COMPONENTS IDEN
  REPLACE ONLY WITH PA
- VOLTAGE (MEASURED W
- ALL PNP TRANSISTORS
- ALL NPN TRANSISTORS
- ALL DIODES ARE EQUIVA
- ELECTROLYTIC CAPACI
- ALL CAPACITORS ARE IN
  EX) 030› 3pF 330› 33pF 3
- ALL RESISTORS ARE IN
- THE THICK LINES ON PC
  EX) PRINT
- CIRCUIT IS SUBJECT TO
- ⁄ IS DC VOLTAGE, AT NO

E F G H

<Notes>
NC=No mount of parts.
[ ] Values are for HT-R520

Refer to the following table about the parts displayed by mark "★".

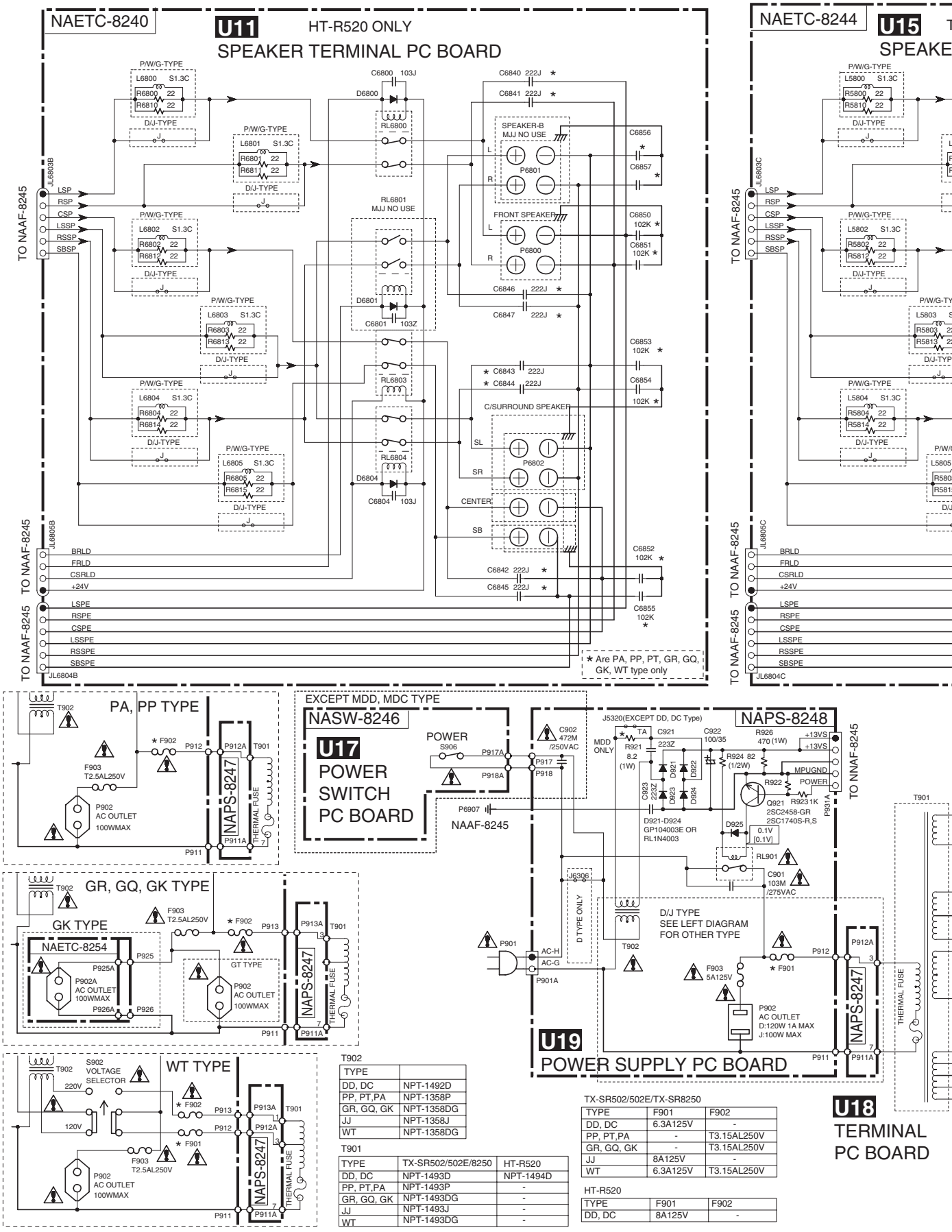
REF. NO.	TX-SR502/ 502E/ 8250/ TX-SA502	HT-R520
Q5000-05,5010-15	KTC3200-BL OR 2SC1775A-E,F OR 2SC1845-E	KTC3200-BL OR 2SC1775A-E,F OR 2SC1845-E
Q5030-35	KTA1024-Y,O OR 2SA949-Y,O	2SA949(ONK)-Y,O
Q5040-45	KTC3206-Y,O OR 2SC2229-Y,O	2SC2229(ONK)-Y,O
Q5050-55	KTC3199-GR,2SC1740S-R,S,2SC2458-GR	KTC3200-BL,GR OR 2SC1775A-E,F OR 2SC1845-E,F



S IDENTIFIED BY MARK ⚠ ARE CRITICAL FOR SAFETY
ITH PART NUMBER SPECIFIED
RED WITH VOLTMETER) ⟨ IS DC VOLTAGE.(NO INPUT SIGNAL)
TORS ARE EQUIVALENT TO 2SA1015-GR UNLESS OTHERWISE NOTED.
TORS ARE EQUIVALENT TO 2SC1815-GR UNLESS OTHERWISE NOTED.
EQUIVALENT TO 1SS133 UNLESS OTHERWISE NOTED.
APACITORS (⊣⊢) ARE IN u F/WV.
ARE IN pF/50WV UNLESS OTHERWISE NOTED.
3pF 331› 330pF 333› 0.033uF
RE IN OHMS 1/4WATTS UNLESS OTHERWISE NOTED.
ON PC BOARD ARE THE PRINTING SIDE OF THE PARTS.
PRINTING SIDE
CT TO CHANGE FOR IMPROVEMENT.
AT NO INPUT SIGNAL.

SCHEMATIC DIAGRAMS-4

SPEAKER TERMINAL & POWER SUPPLY SECTION



T902

TYPE	
DD, DC	NPT-1492D
PP, PT,PA	NPT-1358P
GR, GQ, GK	NPT-1358DG
JJ	NPT-1358J
WT	NPT-1358DG

T901

TYPE	TX-SR502/502E/8250	HT-R520
DD, DC	NPT-1493D	NPT-1494D
PP, PT,PA	NPT-1493P	-
GR, GQ, GK	NPT-1493DG	-
JJ	NPT-1493J	-
WT	NPT-1493DG	-

TX-SR502/502E/TX-SR8250

TYPE	F901	F902
DD, DC	6.3A125V	-
PP, PT,PA	-	T3.15AL250V
GR, GQ, GK	-	T3.15AL250V
JJ	8A125V	-
WT	6.3A125V	T3.15AL250V

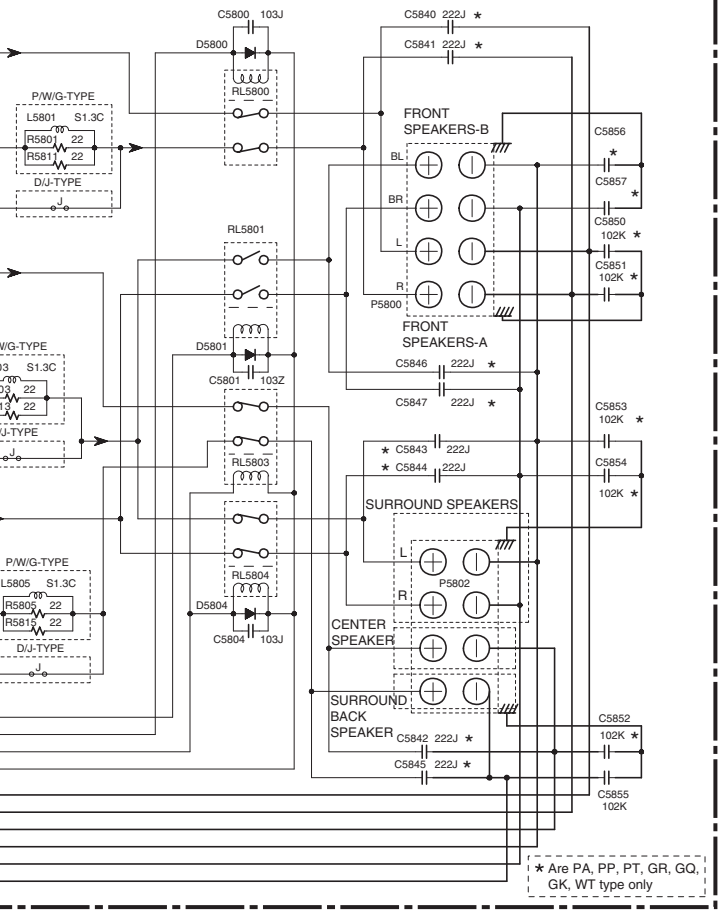
HT-R520

TYPE	F901	F902
DD, DC	8A125V	-

E F G H

TX-SR502, 502E, 8250 ONLY

KER TERMINAL PC BOARD



NOTE

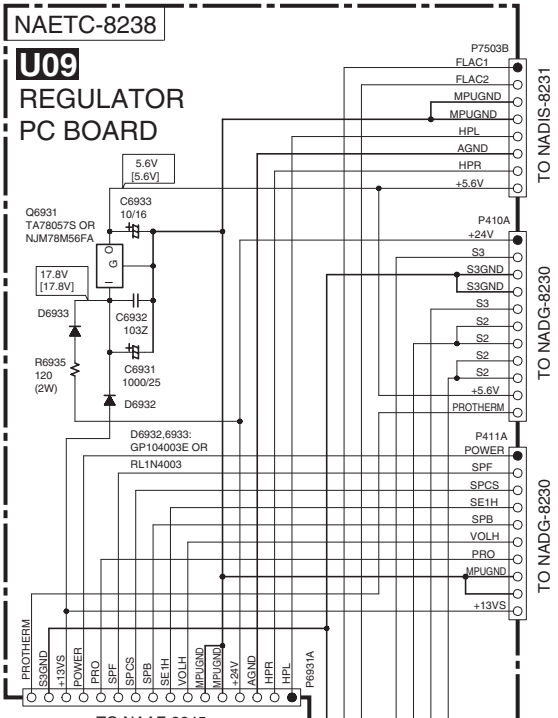
- THE COMPONENTS IDENTIFIED BY MARK ⚠ ARE CRITICAL FOR SAFETY REPLACE ONLY WITH PART NUMBER SPECIFIED
- VOLTAGE (MEASURED WITH VOLTMETER) ⟸ IS DC VOLTAGE.(NO INPUT SIGNAL)
- ALL PNP TRANSISTORS ARE EQUIVALENT TO 2SA1015-GR UNLESS OTHERWISE NOTED.
- ALL NPN TRANSISTORS ARE EQUIVALENT TO 2SC1815-GR UNLESS OTHERWISE NOTED.
- ALL DIODES ARE EQUIVALENT TO 1SS133 UNLESS OTHERWISE NOTED.
- ELECTROLYTIC CAPACITORS (⊣⊢) ARE IN u F/WV.
- ALL CAPACITORS ARE IN pF/50WV UNLESS OTHERWISE NOTED.
  EX) 030› 3pF 330› 33pF 331› 330pF 333› 0.033uF
- ALL RESISTORS ARE IN OHMS 1/4WATTS UNLESS OTHERWISE NOTED.
- THE THICK LINES ON PC BOARD ARE THE PRINTING SIDE OF THE PARTS.
  EX) ⊓⊓⊓ PRINTING SIDE
- CIRCUIT IS SUBJECT TO CHANGE FOR IMPROVEMENT.
- ⟋IS DC VOLTAGE, AT NO INPUT SIGNAL.

<Notes>
NC=No mount of parts.
[ ] Values are for HT-R520

NAETC-8238

U09

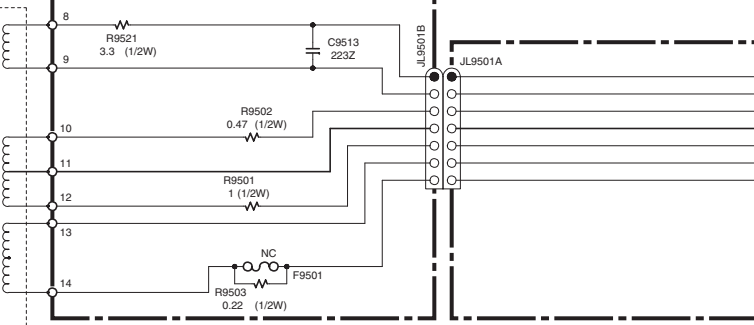
REGULATOR PC BOARD



NAETC-8239

U10

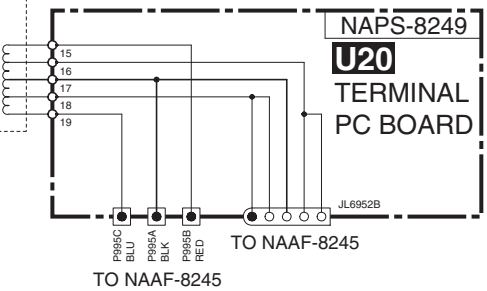
TERMINAL PC BOARD



NAPS-8249

U20

TERMINAL PC BOARD



CAUTION

FOR CONTINUED PROTECTION AGAINST FIRE HAZARD, REPLACE ONLY WITH FUSE OF SAME TYPE AND RATING INDICATED.

THIS SYMBOL LOCATED NEAR THE FUSE INDICATES THAT THE FUSE USED IS SLOW OPERATING TYPE FOR CONTINUED PROTECTION AGAINST FIRE HAZARD,REPLACE WITH SAME TYPE FUSE. FOR FUSE RATING REFER TO THE MARKING ADJACENT TO THE SYMBOL

ATTENTION

AFIN D'ASSURER UNE PROTECTION PERMANENTE CONTRE LES RISQUES D'INCENDIE, REMPLACER UNIQUEMENT PAR UN FUSIBLE DE MEME TYPE ET CALIBRATION COMME INDIQUE.

CE SYMBOLE INDIQUE QUE LE FUSIBLE UTLISE EST E LENT. POUR UNE PROTECTION PERMANENTE,N'UTILISER QUE DES FUSIBLES DE MEME TYPE. CE DARNIER EST INDIQUE LA QU LE PRESENT SYMBOL EST APPOSE.

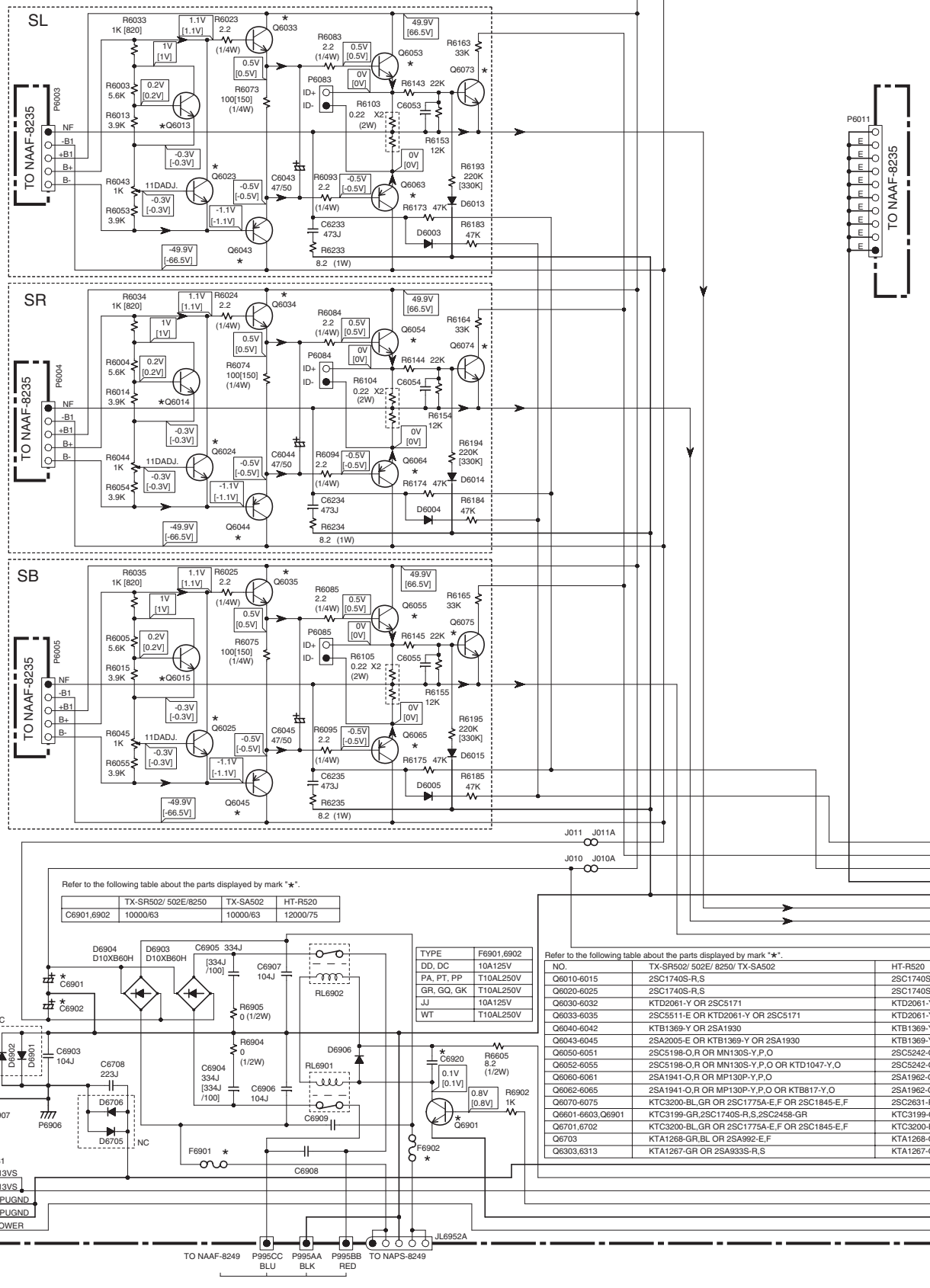
A B C D

SCHEMATIC DIAGRAMS-5

NAAF-8245

U16

POWER AMPLIFIER PC BOARD

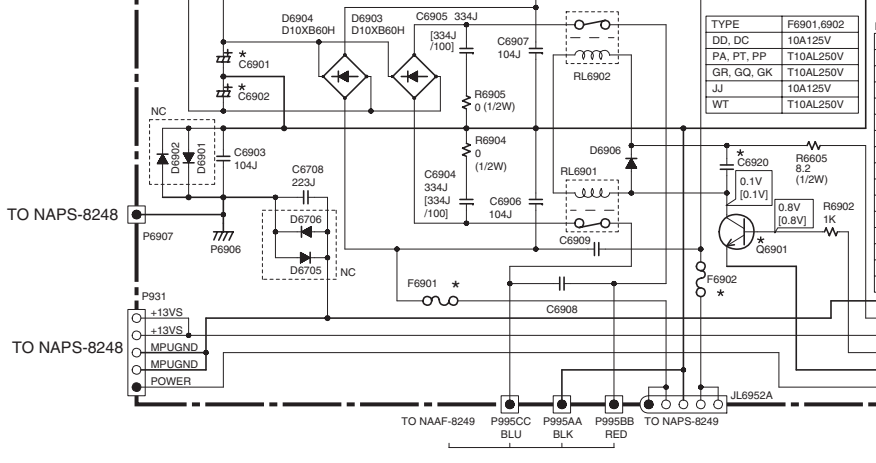


J011 J011A

J010 J010A

Refer to the following table about the parts displayed by mark "★".

	TX-SR502/ 502E/8250	TX-SA502	HT-R520
C6901,6902	10000/63	10000/63	12000/75



TYPE	F6901,6902
DD, DC	10A125V
PA, PT, PP	T10AL250V
GR, GQ, GK	T10AL250V
JJ	10A125V
WT	T10AL250V

Refer to the following table about the parts displayed by mark "★".

NO.	TX-SR502/ 502E/ 8250/ TX-SA502	HT-R520
Q6010-6015	2SC1740S-R,S	2SC1740S
Q6020-6025	2SC1740S-R,S	2SC1740S
Q6030-6032	KTD2061-Y OR 2SC5171	KTD2061-Y
Q6033-6035	2SC5511-E OR KTD2061-Y OR 2SC5171	KTD2061-Y
Q6040-6042	KTB1369-Y OR 2SA1930	KTB1369-Y
Q6043-6045	2SA2005-E OR KTB1369-Y OR 2SA1930	KTB1369-Y
Q6050-6051	2SC5198-O,R OR MN130S-Y,P,O	2SC5242-O
Q6052-6055	2SC5198-O,R OR MN130S-Y,P,O OR KTD1047-Y,O	2SC5242-O
Q6060-6061	2SA1941-O,R OR MP130P-Y,P,O	2SA1962-O
Q6062-6065	2SA1941-O,R OR MP130P-Y,P,O OR KTB817-Y,O	2SA1962-O
Q6070-6075	KTC3200-BL,GR OR 2SC1775A-E,F OR 2SC1845-E,F	2SC2631-Y
Q6601-6603,Q6901	KTC3199-GR,2SC1740S-R,S,2SC2458-GR	KTC3199-G
Q6701,6702	KTC3200-BL,GR OR 2SC1775A-E,F OR 2SC1845-E,F	KTC3200-G
Q6703	KTA1268-GR,BL OR 2SA992-E,F	KTA1268-G
Q6303,6313	KTA1267-GR OR 2SA933S-R,S	KTA1267-G

E F G H

<Notes>
NC=No moune of pares.
[ ] Varues are for HT-R520

NOTE

- THE COMPONENTS IDENTIFIED BY MARK ⚠ ARE CRITICAL FOR SAFETY REPLACE ONLY WITH PART NUMBER SPECIFIED
- ~~VOLTAGE (MEASURED WITH VOLTMETER)~~ ⟵ ~~IS DC VOLTAGE (NO INPUT SIGNAL)~~
- ALL PNP TRANSISTORS ARE EQUIVALENT TO 2SA1015-GR UNLESS OTHERWISE NOTED.
- ALL NPN TRANSISTORS ARE EQUIVALENT TO 2SC1815-GR UNLESS OTHERWISE NOTED.
- ALL DIODES ARE EQUIVALENT TO 1SS133 UNLESS OTHERWISE NOTED.
- ELECTROLYTIC CAPACITORS (⊣⊢) ARE IN u F/WV.
- ALL CAPACITORS ARE IN pF/50WV UNLESS OTHERWISE NOTED.
  EX) 030›3pF 330›33pF 331›330pF 333›0.033uF
- ALL RESISTORS ARE IN OHMS 1/4WATTS UNLESS OTHERWISE NOTED.
- THE THICK LINES ON PC BOARD ARE THE PRINTING SIDE OF THE PARTS.
  EX) ⚬⚬⚬ PRINTING SIDE
- CIRCUIT IS SUBJECT TO CHANGE FOR IMPROVEMENT.
- ⟋IS DC VOLTAGE, AT NO INPUT SIGNAL.

L
R
C

TO NAAF-8235
P6000
P6001
P6002
NF
-B1
+B1
B+
B-

R6030 820 [680] R6020 2.2 (1/4W) Q6030
R6080 2.2 (1/4W) Q6050 R6160 33K Q6070
R6000 5.6K R6010 3.9K Q6010
R6070 100[120] (1/4W)
P6080 ID+ ID-
R6100 0.22 X2 (2W)
R6140 22K C6050 R6150 12K
C6040 47/50
R6040 1K R6050 3.9K 11DADJ. Q6020
R6090 2.2 (1/4W) Q6060 R6170 47K D6010
R6190 220K [330K]
C6230 473J R6230 8.2 (1W) Q6040 D6000 R6180 47K

R6031 820 [680] R6021 2.2 (1/4W) Q6031
R6081 2.2 (1/4W) Q6051 R6161 33K Q6071
R6001 5.6K R6011 3.9K Q6011
R6071 100[120] (1/4W)
P6081 ID+ ID-
R6101 0.22 X2 (2W)
R6141 22K C6051 R6151 12K
C6041 47/50
R6041 1K R6051 3.9K 11DADJ. Q6021
R6091 2.2 (1/4W) Q6061 R6171 47K D6011
R6191 220K [330K]
C6231 473J R6231 8.2 (1W) Q6041 D6001 R6181 47K

R6032 820 [680] R6022 2.2 (1/4W) Q6032
R6082 2.2 (1/4W) Q6052 R6162 33K Q6072
R6002 5.6K R6012 3.9K Q6012
R6072 100[150] (1/4W)
P6082 ID+ ID-
R6102 0.22 X2 (2W)
R6142 22K C6052 R6152 12K
C6042 47/50
R6042 1K R6052 3.9K 11DADJ. Q6022
R6092 2.2 (1/4W) Q6062 R6172 47K D6012
R6192 220K [330K]
C6232 473J R6232 8.2 (1W) Q6042 D6002 R6182 47K

1.1V [1.1V] 1V [1V] 0.5V [0.5V] 0.2V [0.2V] 0V [0V] -0.3V [-0.3V] -0.5V [-0.5V] -1.1V [-1.1V] -49.9V [-66.5V] 49.9V [66.5V]

TH2 COM TH1
JL6402A TH1 +24V TH2
NAETC-8255
JL6402B THERMISTOR R6380 PTFL04BF 471Q2N34BO R6381 PTFL04BC 471Q2N34B0

24V
D6307 D6306 Q6313 Q6303 R6317 470 R6307 470
R6306 10K R6308 4.7K 0V
R6318 4.7K

JL6804A
LSPE RSPE CSPE LSSPE RSSPE SBSPE
TO NAETC-8240 (HT-R520)
TO NAETC-8244 (TX-SR502/ 502E/ 8250)

JL6803A
LSP RSP CSP LSSP RSSP SBSP
TO NAETC-8240 (HT-R520)
TO NAETC-8244 (TX-SR502/ 502E/ 8250)

R6981 390 (1/2W) R6980 390 (1/2W)

JL6805A
BRLD FRLD CSRLD +24V HPL HPR E +24V MPUGND MPUGND VOLH SEC1H SPB SPCS SPF PRO POWER +13VS RLGND PROTHERM
TO NAETC-8240 (HT-R520)
TO NAETC-8244 (TX-SR502/ 502E/ 8250)
P6931
TO NAETC-8238

24V 0.05V Q6601 Q6603 Q6602 24V R6604 8.2 (1/2W)
0.8V 0V 0V
R6601 1K R6603 1K R6602 1K

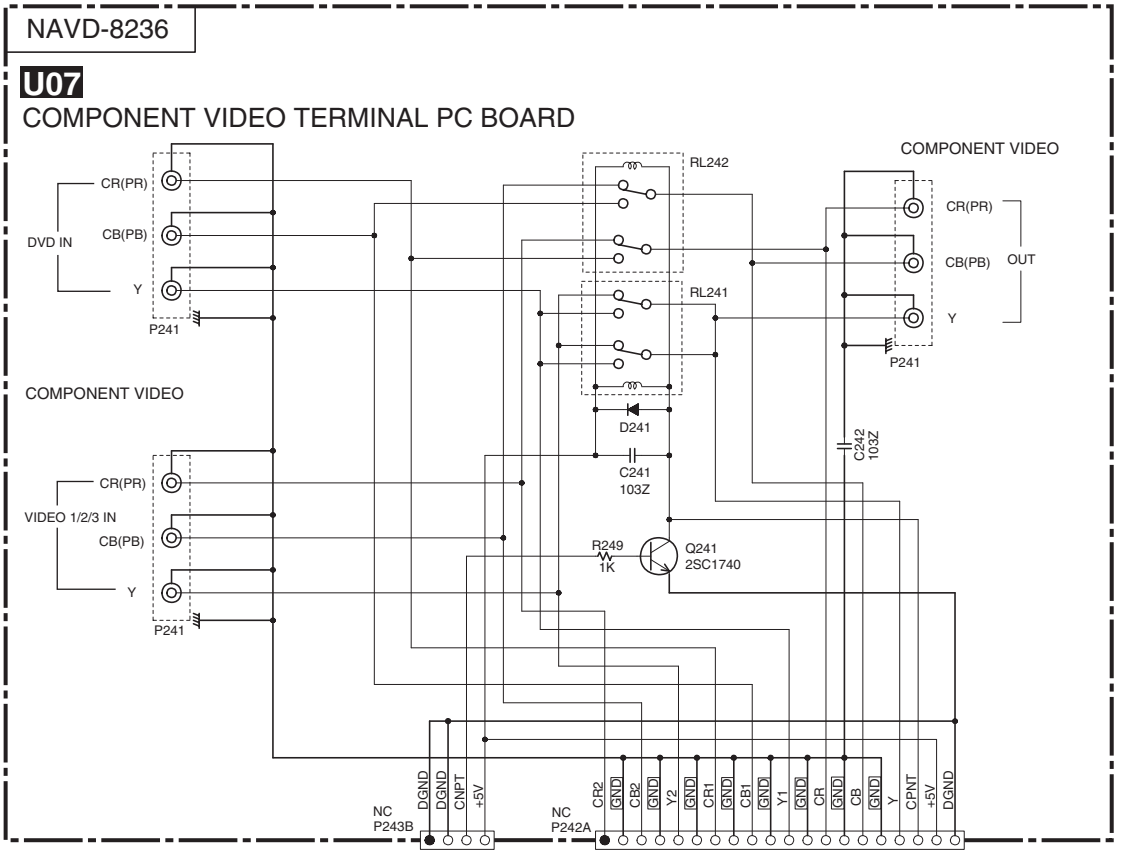
R6702 10K C6703 223Z +B1 Q6703 R6701 22K
D6714 MTZJ5.1B C6716 100/6.3 R6719 5.6K
R6708 33K R6704 47K Q6701 Q6702
D6703 MTZJ5.1B D6704 MTZJ5.1B
D6701 C6704 1/50 D6702 C6701 100/6.3 [220/6.3]
R6706 220K C6706 100/6.3 R6709 5.6K R6710 47K [12K]
+13VS POWER

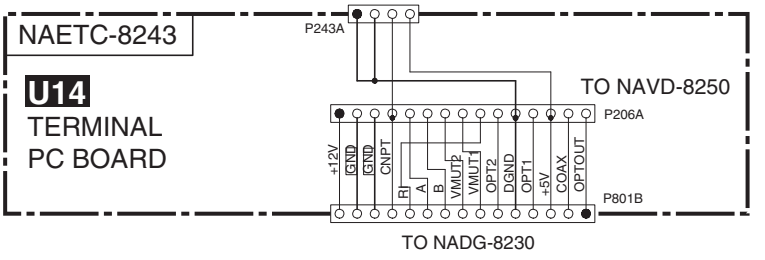
R520
C1740S-R,S
C1740S-R,S
2061-Y OR 2SC5171
2061-Y OR 2SC5171
1369-Y OR 2SA1930
1369-Y OR 2SA1930
5242-O,R OR MN150S-Y,P,O
5242-O,R OR MN150S-Y,P,O OR KTC5242-O,R
1962-O,R OR MP150S-Y,P,O
1962-O,R OR MP150S-Y,P,O OR KTA1962-O,R
C2631-R,S
3199-GR,2SC1740S-R,S,2SC2458-GR
3200-BL,GR OR 2SC1775A-E,F OR 2SC1845-E,F
1268-GR,BL OR 2SA992-E,F
1267-GR OR 2SA933S-R,S

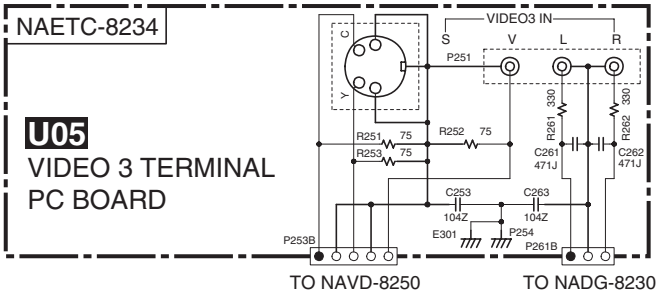
U26
THERMAL SENSOR
PC BOARD

SCHEMATIC DIAGRAMS-6

VIDEO SECTION



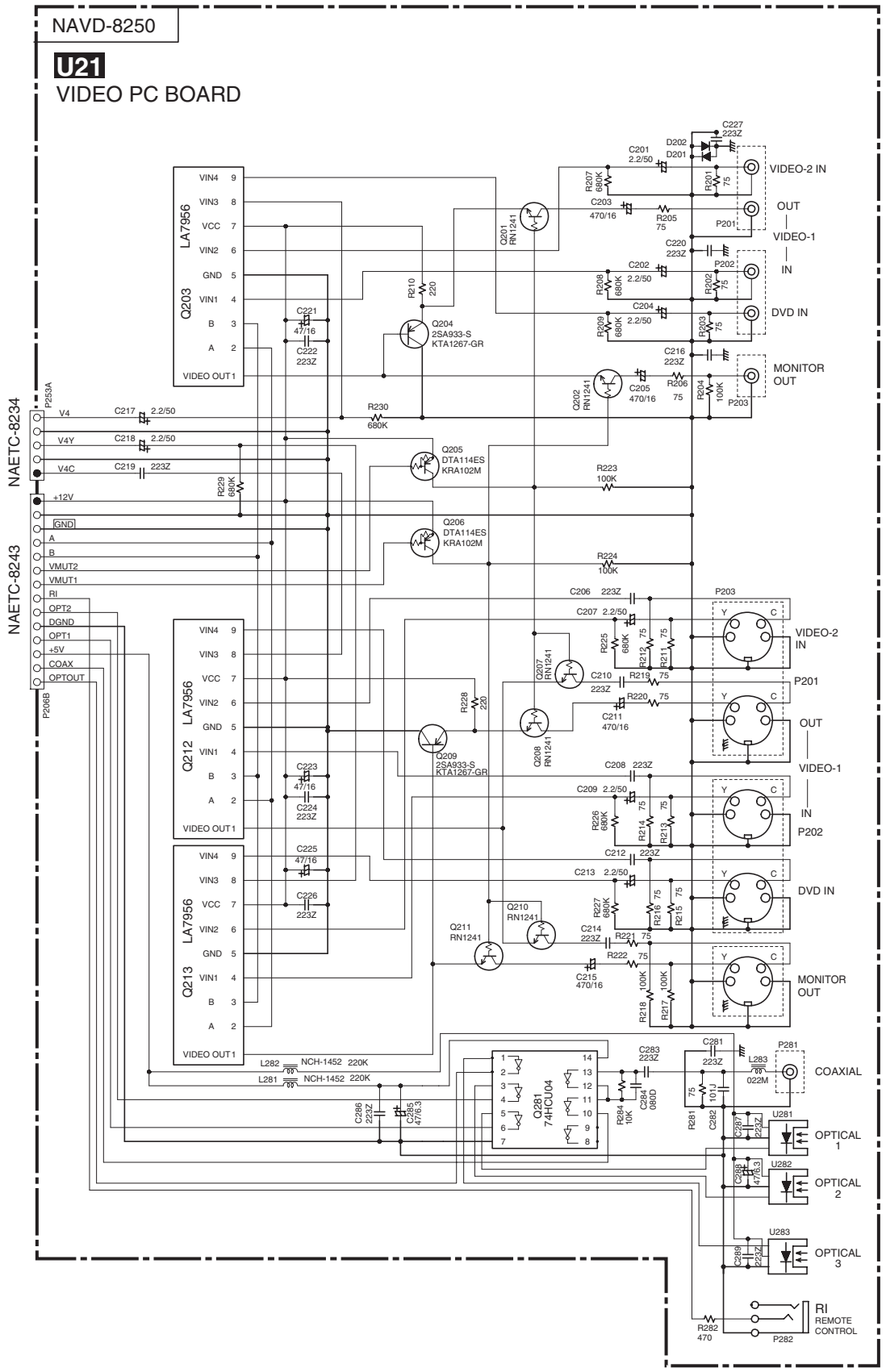




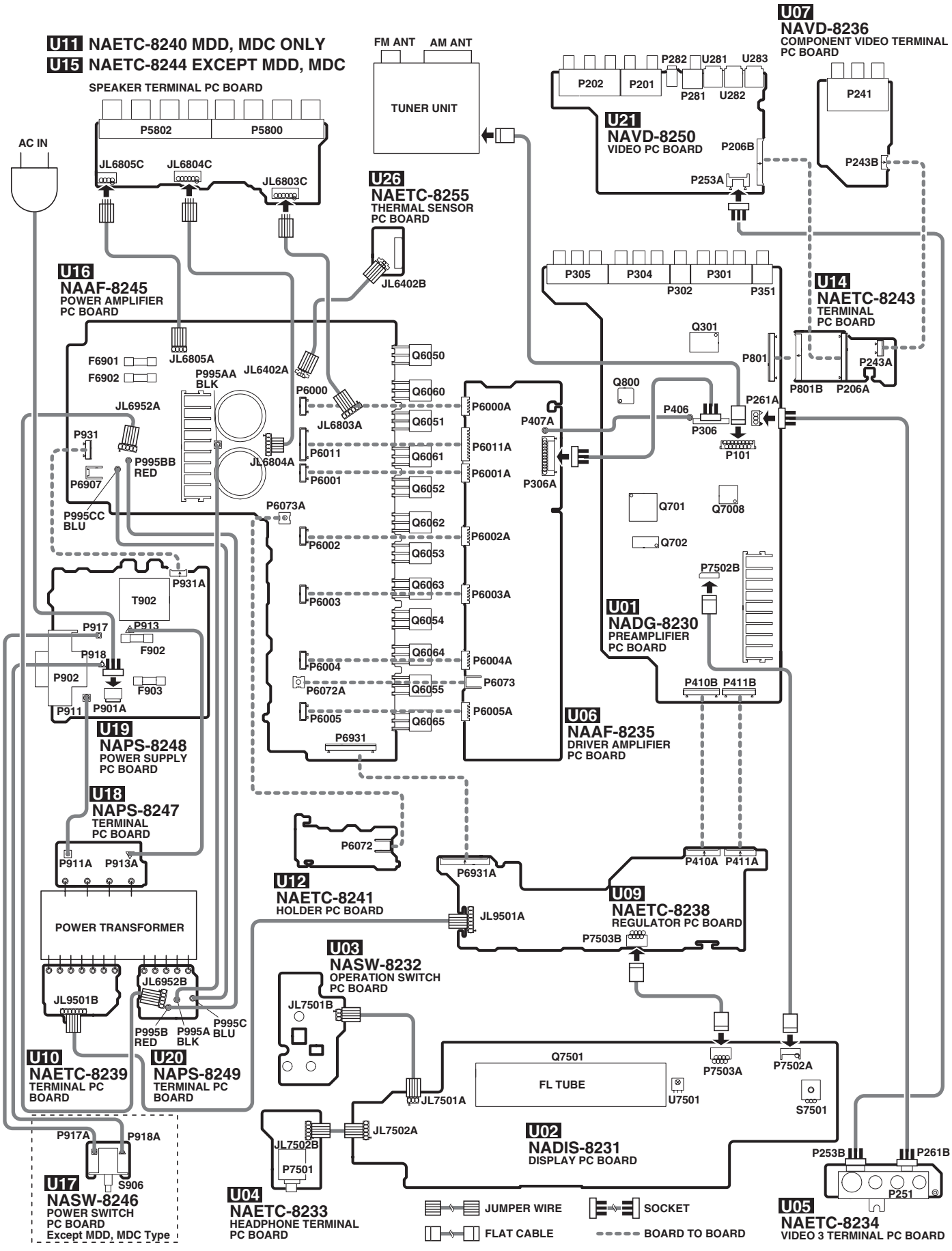
E F G H

NAVD-8250

U21
VIDEO PC BOARD



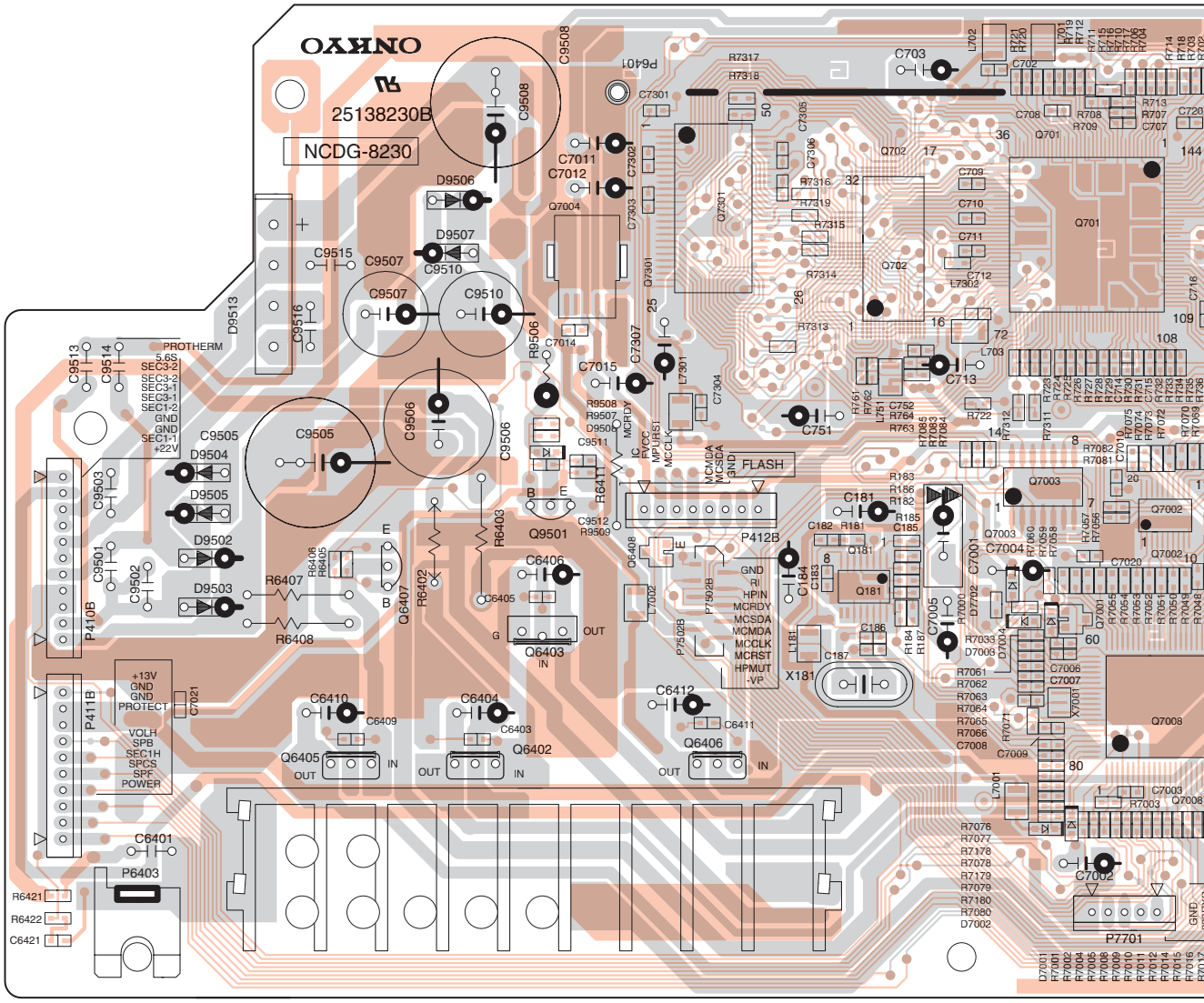
PC BOARD CONNECTION DIAGRAM



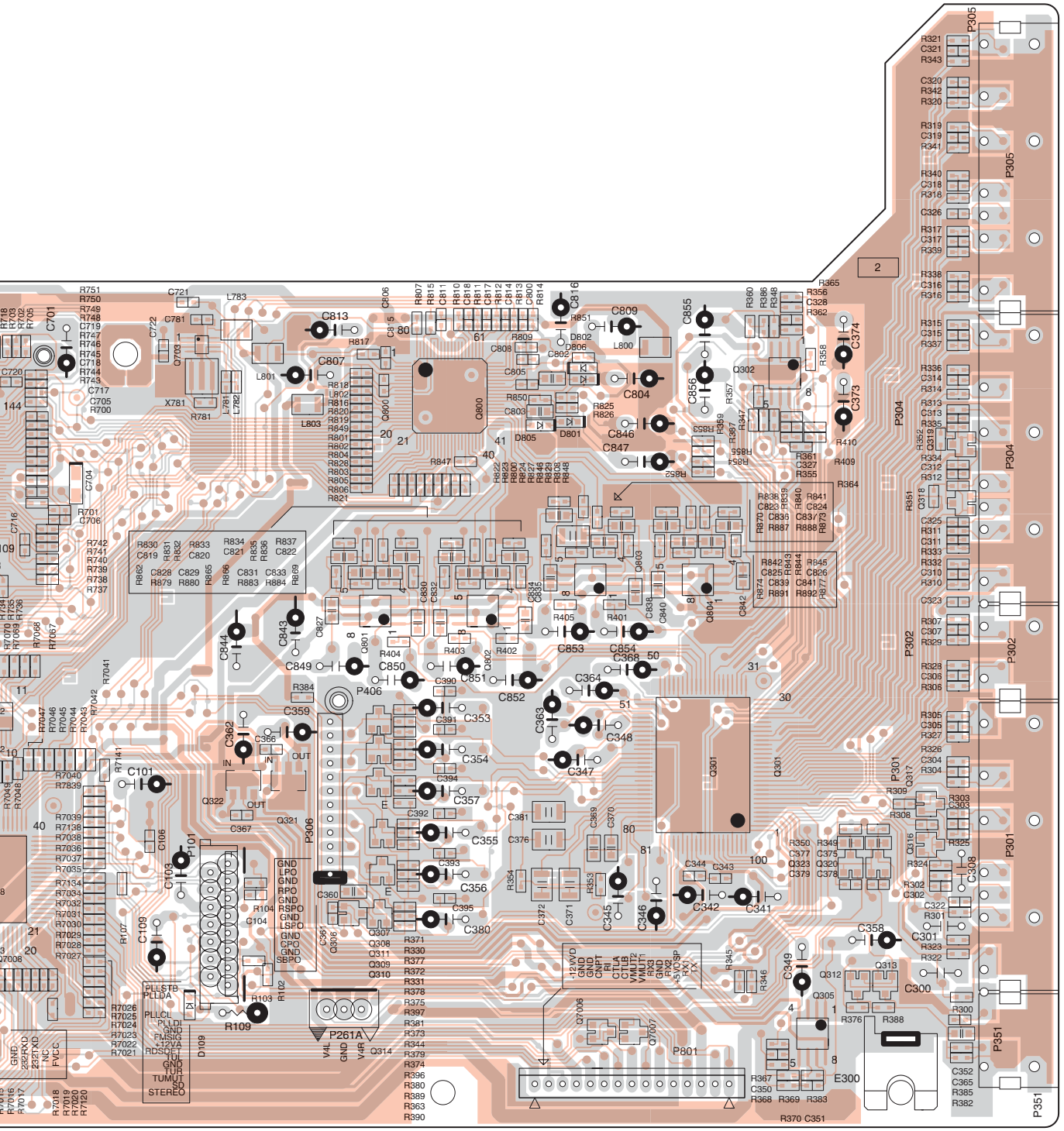
PRINTED CIRCUIT BOARD VIEWS-1

U01 PREAMPLIFIER PC BOARD (NADG-8230)

Component side



E F G H


P305
P304
P302
P301
P351
P306
P261A
P406
P801
E300
C300
C813
C807
C809
C804
C846
C847
C816
C855
C856
C374
C373
C410
C409
C364
C348
C347
C853
C854
C850
C851
C852
C849
C844
C843
C359
C382
C101
C109
C103
C106
C104
C107
C105
C701
C704
C706
C716
C721
C722
C781
C720
C717
C718
C719
C747
C746
C745
C744
C743
C742
C741
C740
C739
C738
C737
C734
C735
C736
C733
C732
C731
C730
C729
C728
C727
C726
C725
C724
C723
C722
C721
C720
C719
C718
C717
C716
C715
C714
C713
C712
C711
C710
C709
C708
C707
C706
C705
C704
C703
C702
C701
C700
C699
C698
C697
C696
C695
C694
C693
C692
C691
C690
C689
C688
C687
C686
C685
C684
C683
C682
C681
C680
C679
C678
C677
C676
C675
C674
C673
C672
C671
C670
C669
C668
C667
C666
C665
C664
C663
C662
C661
C660
C659
C658
C657
C656
C655
C654
C653
C652
C651
C650
C649
C648
C647
C646
C645
C644
C643
C642
C641
C640
C639
C638
C637
C636
C635
C634
C633
C632
C631
C630
C629
C628
C627
C626
C625
C624
C623
C622
C621
C620
C619
C618
C617
C616
C615
C614
C613
C612
C611
C610
C609
C608
C607
C606
C605
C604
C603
C602
C601
C600
C399
C398
C397
C396
C395
C394
C393
C392
C391
C390
C389
C388
C387
C386
C385
C384
C383
C382
C381
C380
C379
C378
C377
C376
C375
C374
C373
C372
C371
C370
C369
C368
C367
C366
C365
C364
C363
C362
C361
C360
C359
C358
C357
C356
C355
C354
C353
C352
C351
C350
C349
C348
C347
C346
C345
C344
C343
C342
C341
C340
C339
C338
C337
C336
C335
C334
C333
C332
C331
C330
C329
C328
C327
C326
C325
C324
C323
C322
C321
C320
C319
C318
C317
C316
C315
C314
C313
C312
C311
C310
C309
C308
C307
C306
C305
C304
C303
C302
C301
C300
R751
R750
R749
R748
R747
R746
R745
R744
R743
R742
R741
R740
R739
R738
R737
R736
R735
R734
R733
R732
R731
R730
R729
R728
R727
R726
R725
R724
R723
R722
R721
R720
R719
R718
R717
R716
R715
R714
R713
R712
R711
R710
R709
R708
R707
R706
R705
R704
R703
R702
R701
R700
R699
R698
R697
R696
R695
R694
R693
R692
R691
R690
R689
R688
R687
R686
R685
R684
R683
R682
R681
R680
R679
R678
R677
R676
R675
R674
R673
R672
R671
R670
R669
R668
R667
R666
R665
R664
R663
R662
R661
R660
R659
R658
R657
R656
R655
R654
R653
R652
R651
R650
R649
R648
R647
R646
R645
R644
R643
R642
R641
R640
R639
R638
R637
R636
R635
R634
R633
R632
R631
R630
R629
R628
R627
R626
R625
R624
R623
R622
R621
R620
R619
R618
R617
R616
R615
R614
R613
R612
R611
R610
R609
R608
R607
R606
R605
R604
R603
R602
R601
R600
R399
R398
R397
R396
R395
R394
R393
R392
R391
R390
R389
R388
R387
R386
R385
R384
R383
R382
R381
R380
R379
R378
R377
R376
R375
R374
R373
R372
R371
R370
R369
R368
R367
R366
R365
R364
R363
R362
R361
R360
R359
R358
R357
R356
R355
R354
R353
R352
R351
R350
R349
R348
R347
R346
R345
R344
R343
R342
R341
R340
R339
R338
R337
R336
R335
R334
R333
R332
R331
R330
R329
R328
R327
R326
R325
R324
R323
R322
R321
R320
R319
R318
R317
R316
R315
R314
R313
R312
R311
R310
R309
R308
R307
R306
R305
R304
R303
R302
R301
R300
Q800
Q801
Q802
Q803
Q804
Q301
Q302
Q303
Q305
Q306
Q307
Q308
Q309
Q310
Q311
Q312
Q313
Q314
Q315
Q316
Q317
Q318
Q319
Q320
Q321
Q322
Q323
Q324
Q325
Q326
Q327
Q328
Q329
Q330
Q331
Q332
Q333
Q334
Q335
Q336
Q337
Q338
Q339
Q340
Q341
Q342
Q343
Q344
Q345
Q346
Q347
Q348
Q349
Q350
Q351
Q352
Q353
Q354
Q355
Q356
Q357
Q358
Q359
Q360
Q361
Q362
Q363
Q364
Q365
Q366
Q367
Q368
Q369
Q370
Q371
Q372
Q373
Q374
Q375
Q376
Q377
Q378
Q379
Q380
Q381
Q382
Q383
Q384
Q385
Q386
Q387
Q388
Q389
Q390
Q391
Q392
Q393
Q394
Q395
Q396
Q397
Q398
Q399
Q400
Q401
Q402
Q403
Q404
Q405
Q406
Q407
Q408
Q409
Q410
Q411
Q412
Q413
Q414
Q415
Q416
Q417
Q418
Q419
Q420
Q421
Q422
Q423
Q424
Q425
Q426
Q427
Q428
Q429
Q430
Q431
Q432
Q433
Q434
Q435
Q436
Q437
Q438
Q439
Q440
Q441
Q442
Q443
Q444
Q445
Q446
Q447
Q448
Q449
Q450
Q451
Q452
Q453
Q454
Q455
Q456
Q457
Q458
Q459
Q460
Q461
Q462
Q463
Q464
Q465
Q466
Q467
Q468
Q469
Q470
Q471
Q472
Q473
Q474
Q475
Q476
Q477
Q478
Q479
Q480
Q481
Q482
Q483
Q484
Q485
Q486
Q487
Q488
Q489
Q490
Q491
Q492
Q493
Q494
Q495
Q496
Q497
Q498
Q499
Q500
Q501
Q502
Q503
Q504
Q505
Q506
Q507
Q508
Q509
Q510
Q511
Q512
Q513
Q514
Q515
Q516
Q517
Q518
Q519
Q520
Q521
Q522
Q523
Q524
Q525
Q526
Q527
Q528
Q529
Q530
Q531
Q532
Q533
Q534
Q535
Q536
Q537
Q538
Q539
Q540
Q541
Q542
Q543
Q544
Q545
Q546
Q547
Q548
Q549
Q550
Q551
Q552
Q553
Q554
Q555
Q556
Q557
Q558
Q559
Q560
Q561
Q562
Q563
Q564
Q565
Q566
Q567
Q568
Q569
Q570
Q571
Q572
Q573
Q574
Q575
Q576
Q577
Q578
Q579
Q580
Q581
Q582
Q583
Q584
Q585
Q586
Q587
Q588
Q589
Q590
Q591
Q592
Q593
Q594
Q595
Q596
Q597
Q598
Q599
Q600
Q601
Q602
Q603
Q604
Q605
Q606
Q607
Q608
Q609
Q610
Q611
Q612
Q613
Q614
Q615
Q616
Q617
Q618
Q619
Q620
Q621
Q622
Q623
Q624
Q625
Q626
Q627
Q628
Q629
Q630
Q631
Q632
Q633
Q634
Q635
Q636
Q637
Q638
Q639
Q640
Q641
Q642
Q643
Q644
Q645
Q646
Q647
Q648
Q649
Q650
Q651
Q652
Q653
Q654
Q655
Q656
Q657
Q658
Q659
Q660
Q661
Q662
Q663
Q664
Q665
Q666
Q667
Q668
Q669
Q670
Q671
Q672
Q673
Q674
Q675
Q676
Q677
Q678
Q679
Q680
Q681
Q682
Q683
Q684
Q685
Q686
Q687
Q688
Q689
Q690
Q691
Q692
Q693
Q694
Q695
Q696
Q697
Q698
Q699
Q700
Q701
Q702
Q703
Q704
Q705
Q706
Q707
Q708
Q709
Q710
Q711
Q712
Q713
Q714
Q715
Q716
Q717
Q718
Q719
Q720
Q721
Q722
Q723
Q724
Q725
Q726
Q727
Q728
Q729
Q730
Q731
Q732
Q733
Q734
Q735
Q736
Q737
Q738
Q739
Q740
Q741
Q742
Q743
Q744
Q745
Q746
Q747
Q748
Q749
Q750
Q751
Q752
Q753
Q754
Q755
Q756
Q757
Q758
Q759
Q760
Q761
Q762
Q763
Q764
Q765
Q766
Q767
Q768
Q769
Q770
Q771
Q772
Q773
Q774
Q775
Q776
Q777
Q778
Q779
Q780
Q781
Q782
Q783
Q784
Q785
Q786
Q787
Q788
Q789
Q790
Q791
Q792
Q793
Q794
Q795
Q796
Q797
Q798
Q799
Q800
Q801
Q802
Q803
Q804
Q805
Q806
Q807
Q808
Q809
Q810
Q811
Q812
Q813
Q814
Q815
Q816
Q817
Q818
Q819
Q820
Q821
Q822
Q823
Q824
Q825
Q826
Q827
Q828
Q829
Q830
Q831
Q832
Q833
Q834
Q835
Q836
Q837
Q838
Q839
Q840
Q841
Q842
Q843
Q844
Q845
Q846
Q847
Q848
Q849
Q850
Q851
Q852
Q853
Q854
Q855
Q856
Q857
Q858
Q859
Q860
Q861
Q862
Q863
Q864
Q865
Q866
Q867
Q868
Q869
Q870
Q871
Q872
Q873
Q874
Q875
Q876
Q877
Q878
Q879
Q880
Q881
Q882
Q883
Q884
Q885
Q886
Q887
Q888
Q889
Q890
Q891
Q892
Q893
Q894
Q895
Q896
Q897
Q898
Q899
Q900
Q901
Q902
Q903
Q904
Q905
Q906
Q907
Q908
Q909
Q910
Q911
Q912
Q913
Q914
Q915
Q916
Q917
Q918
Q919
Q920
Q921
Q922
Q923
Q924
Q925
Q926
Q927
Q928
Q929
Q930
Q931
Q932
Q933
Q934
Q935
Q936
Q937
Q938
Q939
Q940
Q941
Q942
Q943
Q944
Q945
Q946
Q947
Q948
Q949
Q950
Q951
Q952
Q953
Q954
Q955
Q956
Q957
Q958
Q959
Q960
Q961
Q962
Q963
Q964
Q965
Q966
Q967
Q968
Q969
Q970
Q971
Q972
Q973
Q974
Q975
Q976
Q977
Q978
Q979
Q980
Q981
Q982
Q983
Q984
Q985
Q986
Q987
Q988
Q989
Q990
Q991
Q992
Q993
Q994
Q995
Q996
Q997
Q998
Q999
Q1000
D100
D101
D102
D103
D104
D105
D106
D107
D108
D109
D110
D111
D112
D113
D114
D115
D116
D117
D118
D119
D120
D121
D122
D123
D124
D125
D126
D127
D128
D129
D130
D131
D132
D133
D134
D135
D136
D137
D138
D139
D140
D141
D142
D143
D144
D145
D146
D147
D148
D149
D150
D151
D152
D153
D154
D155
D156
D157
D158
D159
D160
D161
D162
D163
D164
D165
D166
D167
D168
D169
D170
D171
D172
D173
D174
D175
D176
D177
D178
D179
D180
D181
D182
D183
D184
D185
D186
D187
D188
D189
D190
D191
D192
D193
D194
D195
D196
D197
D198
D199
D200
D201
D202
D203
D204
D205
D206
D207
D208
D209
D210
D211
D212
D213
D214
D215
D216
D217
D218
D219
D220
D221
D222
D223
D224
D225
D226
D227
D228
D229
D230
D231
D232
D233
D234
D235
D236
D237
D238
D239
D240
D241
D242
D243
D244
D245
D246
D247
D248
D249
D250
D251
D252
D253
D254
D255
D256
D257
D258
D259
D260
D261
D262
D263
D264
D265
D266
D267
D268
D269
D270
D271
D272
D273
D274
D275
D276
D277
D278
D279
D280
D281
D282
D283
D284
D285
D286
D287
D288
D289
D290
D291
D292
D293
D294
D295
D296
D297
D298
D299
D300
D301
D302
D303
D304
D305
D306
D307
D308
D309
D310
D311
D312
D313
D314
D315
D316
D317
D318
D319
D320
D321
D322
D323
D324
D325
D326
D327
D328
D329
D330
D331
D332
D333
D334
D335
D336
D337
D338
D339
D340
D341
D342
D343
D344
D345
D346
D347
D348
D349
D350
D351
D352
D353
D354
D355
D356
D357
D358
D359
D360
D361
D362
D363
D364
D365
D366
D367
D368
D369
D370
D371
D372
D373
D374
D375
D376
D377
D378
D379
D380
D381
D382
D383
D384
D385
D386
D387
D388
D389
D390
D391
D392
D393
D394
D395
D396
D397
D398
D399
D400
D401
D402
D403
D404
D405
D406
D407
D408
D409
D410
D411
D412
D413
D414
D415
D416
D417
D418
D419
D420
D421
D422
D423
D424
D425
D426
D427
D428
D429
D430
D431
D432
D433
D434
D435
D436
D437
D438
D439
D440
D441
D442
D443
D444
D445
D446
D447
D448
D449
D450
D451
D452
D453
D454
D455
D456
D457
D458
D459
D460
D461
D462
D463
D464
D465
D466
D467
D468
D469
D470
D471
D472
D473
D474
D475
D476
D477
D478
D479
D480
D481
D482
D483
D484
D485
D486
D487
D488
D489
D490
D491
D492
D493
D494
D495
D496
D497
D498
D499
D500
D501
D502
D503
D504
D505
D506
D507
D508
D509
D510
D511
D512
D513
D514
D515
D516
D517
D518
D519
D520
D521
D522
D523
D524
D525
D526
D527
D528
D529
D530
D531
D532
D533
D534
D535
D536
D537
D538
D539
D540
D541
D542
D543
D544
D545
D546
D547
D548
D549
D550
D551
D552
D553
D554
D555
D556
D557
D558
D559
D560
D561
D562
D563
D564
D565
D566
D567
D568
D569
D570
D571
D572
D573
D574
D575
D576
D577
D578
D579
D580
D581
D582
D583
D584
D585
D586
D587
D588
D589
D590
D591
D592
D593
D594
D595
D596
D597
D598
D599
D600
D601
D602
D603
D604
D605
D606
D607
D608
D609
D610
D611
D612
D613
D614
D615
D616
D617
D618
D619
D620
D621
D622
D623
D624
D625
D626
D627
D628
D629
D630
D631
D632
D633
D634
D635
D636
D637
D638
D639
D640
D641
D642
D643
D644
D645
D646
D647
D648
D649
D650
D651
D652
D653
D654
D655
D656
D657
D658
D659
D660
D661
D662
D663
D664
D665
D666
D667
D668
D669
D670
D671
D672
D673
D674
D675
D676
D677
D678
D679
D680
D681
D682
D683
D684
D685
D686
D687
D688
D689
D690
D691
D692
D693
D694
D695
D696
D697
D698
D699
D700
D701
D702
D703
D704
D705
D706
D707
D708
D709
D710
D711
D712
D713
D714
D715
D716
D717
D718
D719
D720
D721
D722
D723
D724
D725
D726
D727
D728
D729
D730
D731
D732
D733
D734
D735
D736
D737
D738
D739
D740
D741
D742
D743
D744
D745
D746
D747
D748
D749
D750
D751
D752
D753
D754
D755
D756
D757
D758
D759
D760
D761
D762
D763
D764
D765
D766
D767
D768
D769
D770
D771
D772
D773
D774
D775
D776
D777
D778
D779
D780
D781
D782
D783
D784
D785
D786
D787
D788
D789
D790
D791
D792
D793
D794
D795
D796
D797
D798
D799
D800
D801
D802
D803
D804
D805
D806
D807
D808
D809
D810
D811
D812
D813
D814
D815
D816
D817
D818
D819
D820
D821
D822
D823
D824
D825
D826
D827
D828
D829
D830
D831
D832
D833
D834
D835
D836
D837
D838
D839
D840
D841
D842
D843
D844
D845
D846
D847
D848
D849
D850
D851
D852
D853
D854
D855
D856
D857
D858
D859
D860
D861
D862
D863
D864
D865
D866
D867
D868
D869
D870
D871
D872
D873
D874
D875
D876
D877
D878
D879
D880
D881
D882
D883
D884
D885
D886
D887
D888
D889
D890
D891
D892
D893
D894
D895
D896
D897
D898
D899
D900
D901
D902
D903
D904
D905
D906
D907
D908
D909
D910
D911
D912
D913
D914
D915
D916
D917
D918
D919
D920
D921
D922
D923
D924
D925
D926
D927
D928
D929
D930
D931
D932
D933
D934
D935
D936
D937
D938
D939
D940
D941
D942
D943
D944
D945
D946
D947
D948
D949
D950
D951
D952
D953
D954
D955
D956
D957
D958
D959
D960
D961
D962
D963
D964
D965
D966
D967
D968
D969
D970
D971
D972
D973
D974
D975
D976
D977
D978
D979
D980
D981
D982
D983
D984
D985
D986
D987
D988
D989
D990
D991
D992
D993
D994
D995
D996
D997
D998
D999
D1000
L100
L101
L102
L103
L104
L105
L106
L107
L108
L109
L110
L111
L112
L113
L114
L115
L116
L117
L118
L119
L120
L121
L122
L123
L124
L125
L126
L127
L128
L129
L130
L131
L132
L133
L134
L135
L136
L137
L138
L139
L140
L141
L142
L143
L144
L145
L146
L147
L148
L149
L150
L151
L152
L153
L154
L155
L156
L157
L158
L159
L160
L161
L162
L163
L164
L165
L166
L167
L168
L169
L170
L171
L172
L173
L174
L175
L176
L177
L178
L179
L180
L181
L182
L183
L184
L185
L186
L187
L188
L189
L190
L191
L192
L193
L194
L195
L196
L197
L198
L199
L200
L201
L202
L203
L204
L205
L206
L207
L208
L209
L210
L211
L212
L213
L214
L215
L216
L217
L218
L219
L220
L221
L222
L223
L224
L225
L226
L227
L228
L229
L230
L231
L232
L233
L234
L235
L236
L237
L238
L239
L240
L241
L242
L243
L244
L245
L246
L247
L248
L249
L250
L251
L252
L253
L254
L255
L256
L257
L258
L259
L260
L261
L262
L263
L264
L265
L266
L267
L268
L269
L270
L271
L272
L273
L274
L275
L276
L277
L278
L279
L280
L281
L282
L283
L284
L285
L286
L287
L288
L289
L290
L291
L292
L293
L294
L295
L296
L297
L298
L299
L300
L301
L302
L303
L304
L305
L306
L307
L308
L309
L310
L311
L312
L313
L314
L315
L316
L317
L318
L319
L320
L321
L322
L323
L324
L325
L326
L327
L328
L329
L330
L331
L332
L333
L334
L335
L336
L337
L338
L339
L340
L341
L342
L343
L344
L345
L346
L347
L348
L349
L350
L351
L352
L353
L354
L355
L356
L357
L358
L359
L360
L361
L362
L363
L364
L365
L366
L367
L368
L369
L370
L371
L372
L373
L374
L375
L376
L377
L378
L379
L380
L381
L382
L383
L384
L385
L386
L387
L388
L389
L390
L391
L392
L393
L394
L395
L396
L397
L398
L399
L400
L401
L402
L403
L404
L405
L406
L407
L408
L409
L410
L411
L412
L413
L414
L415
L416
L417
L418
L419
L420
L421
L422
L423
L424
L425
L426
L427
L428
L429
L430
L431
L432
L433
L434
L435
L436
L437
L438
L439
L440
L441
L442
L443
L444
L445
L446
L447
L448
L449
L450
L451
L452
L453
L454
L455
L456
L457
L458
L459
L460
L461
L462
L463
L464
L465
L466
L467
L468
L469
L470
L471
L472
L473
L474
L475
L476
L477
L478
L479
L480
L481
L482
L483
L484
L485
L486
L487
L488
L489
L490
L491
L492
L493
L494
L495
L496
L497
L498
L499
L500
L501
L502
L503
L504
L505
L506
L507
L508
L509
L510
L511
L512
L513
L514
L515
L516
L517
L518
L519
L520
L521
L522
L523
L524
L525
L526
L527
L528
L529
L530
L531
L532
L533
L534
L535
L536
L537
L538
L539
L540
L541
L542
L543
L544
L545
L546
L547
L548
L549
L550
L551
L552
L553
L554
L555
L556
L557
L558
L559
L560
L561
L562
L563
L564
L565
L566
L567
L568
L569
L570
L571
L572
L573
L574
L575
L576
L577
L578
L579
L580
L581
L582
L583
L584
L585
L586
L587
L588
L589
L590
L591
L592
L593
L594
L595
L596
L597
L598
L599
L600
L601
L602
L603
L604
L605
L606
L607
L608
L609
L610
L611
L612
L613
L614
L615
L616
L617
L618
L619
L620
L621
L622
L623
L624
L625
L626
L627
L628
L629
L630
L631
L632
L633
L634
L635
L636
L637
L638
L639
L640
L641
L642
L643
L644
L645
L646
L647
L648
L649
L650
L651
L652
L653
L654
L655
L656
L657
L658
L659
L660
L661
L662
L663
L664
L665
L666
L667
L668
L669
L670
L671
L672
L673
L674
L675
L676
L677
L678
L679
L680
L681
L682
L683
L684
L685
L686
L687
L688
L689
L690
L691
L692
L693
L694
L695
L696
L697
L698
L699
L700
L701
L702
L703
L704
L705
L706
L707
L708
L709
L710
L711
L712
L713
L714
L715
L716
L717
L718
L719
L720
L721
L722
L723
L724
L725
L726
L727
L728
L729
L730
L731
L732
L733
L734
L735
L736
L737
L738
L739
L740
L741
L742
L743
L744
L745
L746
L747
L748
L749
L750
L751
L752
L753
L754
L755
L756
L757
L758
L759
L760
L761
L762
L763
L764
L765
L766
L767
L768
L769
L770
L771
L772
L773
L774
L775
L776
L777
L778
L779
L780
L781
L782
L783
L784
L785
L786
L787
L788
L789
L790
L791
L792
L793
L794
L795
L796
L797
L798
L799
L800
L801
L802
L803
L804
L805
L806
L807
L808
L809
L810
L811
L812
L813
L814
L815
L816
L817
L818
L819
L820
L821
L822
L823
L824
L825
L826
L827
L828
L829
L830
L831
L832
L833
L834
L835
L836
L837
L838
L839
L840
L841
L842
L843
L844
L845
L846
L847
L848
L849
L850
L851
L852
L853
L854
L855
L856
L857
L858
L859
L860
L861
L862
L863
L864
L865
L866
L867
L868
L869
L870
L871
L872
L873
L874
L875
L876
L877
L878
L879
L880
L881
L882
L883
L884
L885
L886
L887
L888
L889
L890
L891
L892
L893
L894
L895
L896
L897
L898
L899
L900
L901
L902
L903
L904
L905
L906
L907
L908
L909
L910
L911
L912
L913
L914
L915
L916
L917
L918
L919
L920
L921
L922
L923
L924
L925
L926
L927
L928
L929
L930
L931
L932
L933
L934
L935
L936
L937
L938
L939
L940
L941
L942
L943
L944
L945
L946
L947
L948
L949
L950
L951
L952
L953
L954
L955
L956
L957
L958
L959
L960
L961
L962
L963
L964
L965
L966
L967
L968
L969
L970
L971
L972
L973
L974
L975
L976
L977
L978
L979
L980
L981
L982
L983
L984
L985
L986
L987
L988
L989
L990
L991
L992
L993
L994
L995
L996
L997
L998
L999
L1000
GND
LPO
RPO
RSPO
LSPO
SBPO
PLLSTB
PLLDA
PLLCL
PLLDI
FMSW
+12VA
RDSOUT
TEL
TUR
TUMUT
SD
STEREO
12VD
CNPT
RX2
+5VDSP
TX
V4L
V4R
232RXD
232TXD
NC
FVCC
IN
OUT

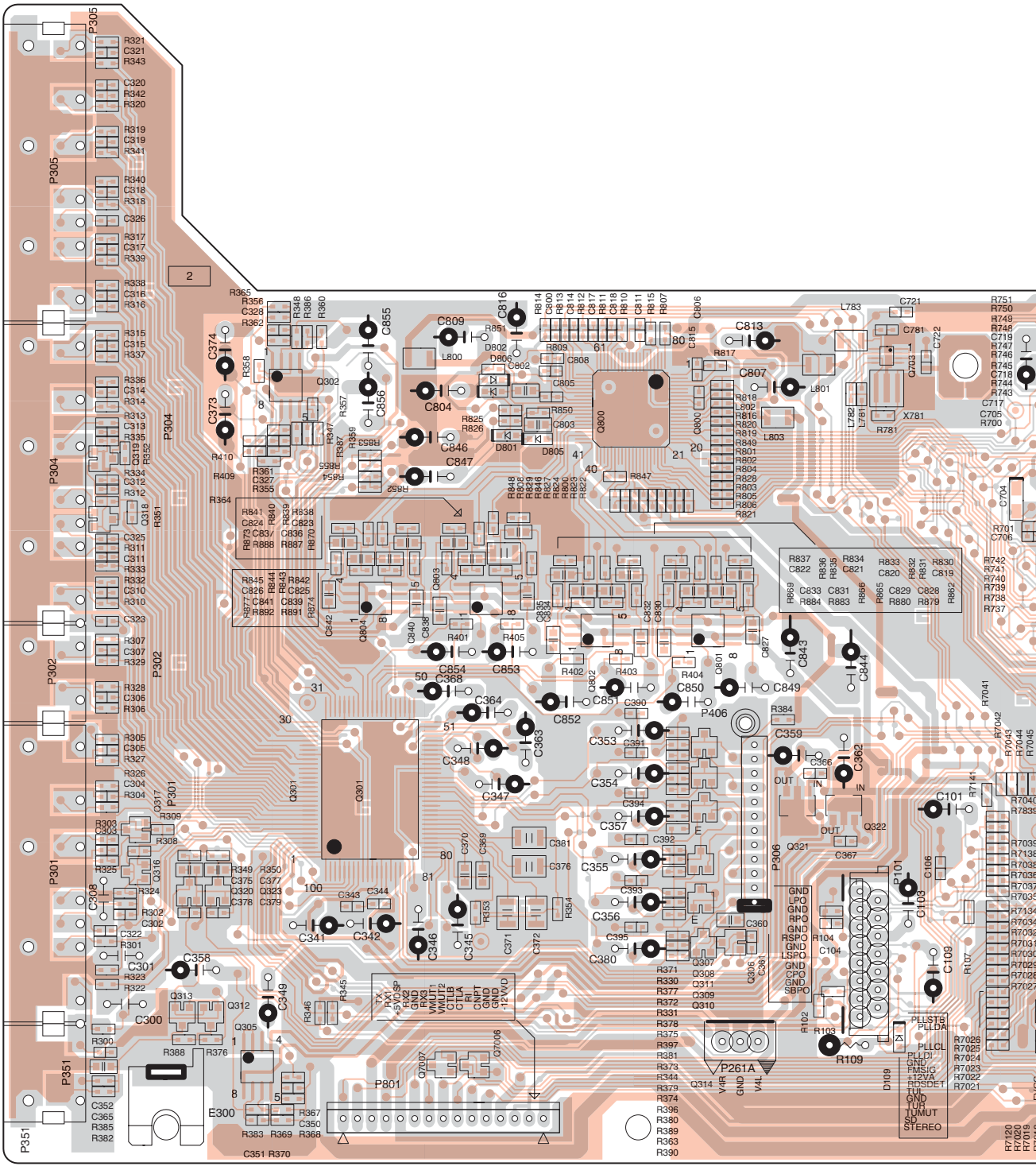
A B C D

PRINTED CIRCUIT BOARD VIEWS-2

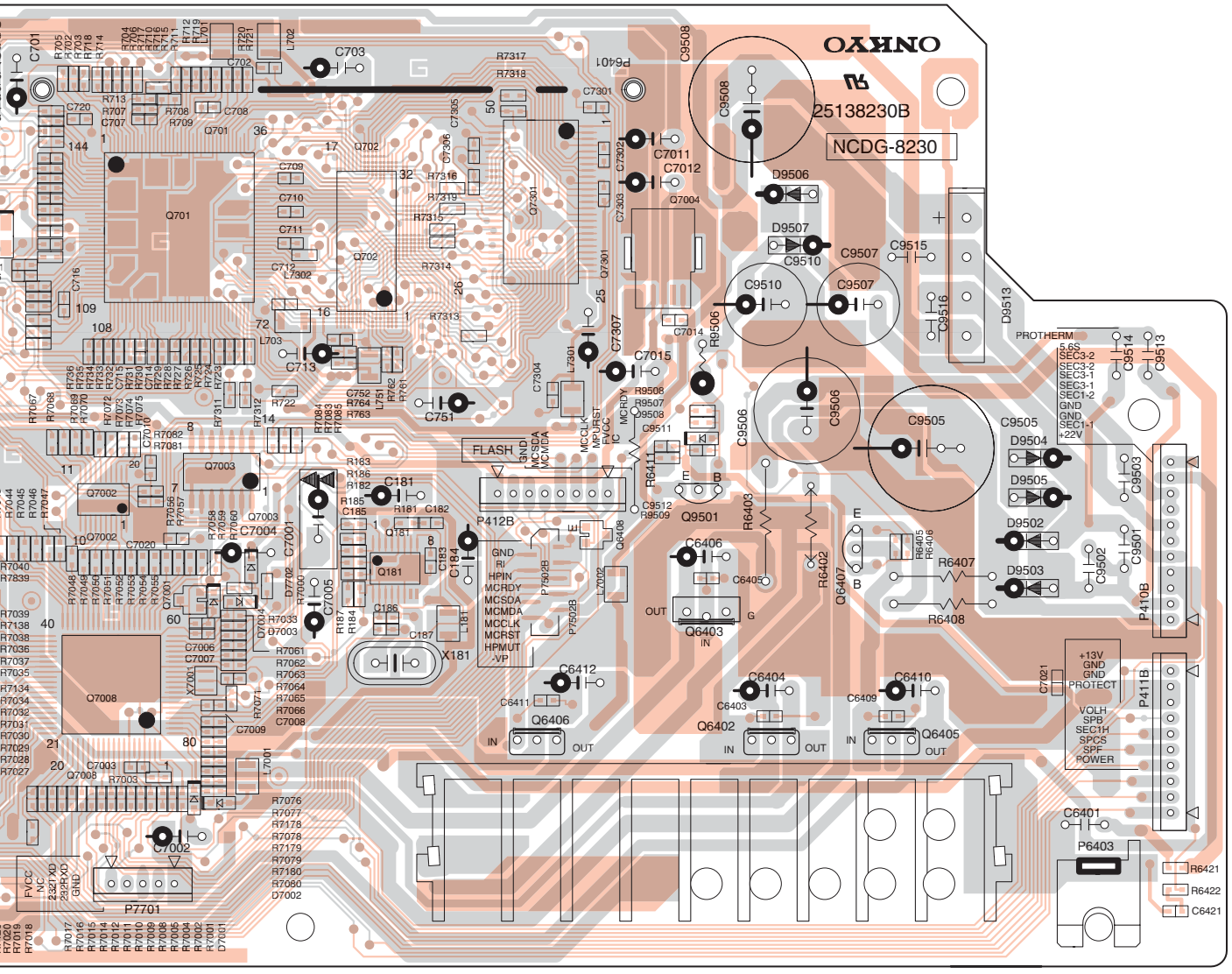
1 2 3 4 5

U01 PREAMPLIFIER PC BOARD (NADG-8230)

Soldering side


P305
P304
P302
P301
P351
P801
P406
P261A
P306
C809
C804
C846
C847
C855
C856
C816
C813
C807
C853
C854
C850
C849
C852
C851
C364
C348
C347
C359
C362
C101
C341
C342
C346
C345
C358
C301
C300
C349
C855
E300
L800
L801
L803
X781
Q800
Q801
Q301
Q302
Q322
Q321
Q312
Q313
P101
C109
R109
C380
C355
C356
C357
C354
C353
C363
C852
C851
C850
C849
C844
C843
C827
C855
C856
C804
C809
C816
C813
C807
C374
C373
C846
C847
C853
C854
C850
C849
C852
C851
C364
C348
C347
C359
C362
C101
C341
C342
C346
C345
C358
C301
C300
C349
C380
C355
C356
C357
C354
C353
C363
C855
E300
P801
P261A
P306

E F G H


ONKYO
25138230B
NCDG-8230
FLASH
P412B
P410B
P411B
P7701
P6403
P6401
Q9501
Q6403
Q6406
Q6402
Q6405
Q6412
Q7004
X181
PROTHERM
SEC3-2
SEC3-1
SEC1-2
SEC1-1
+22V
+13V
PROTECT
VOLH
SPB
SEC1H
SPCS
SPF
POWER

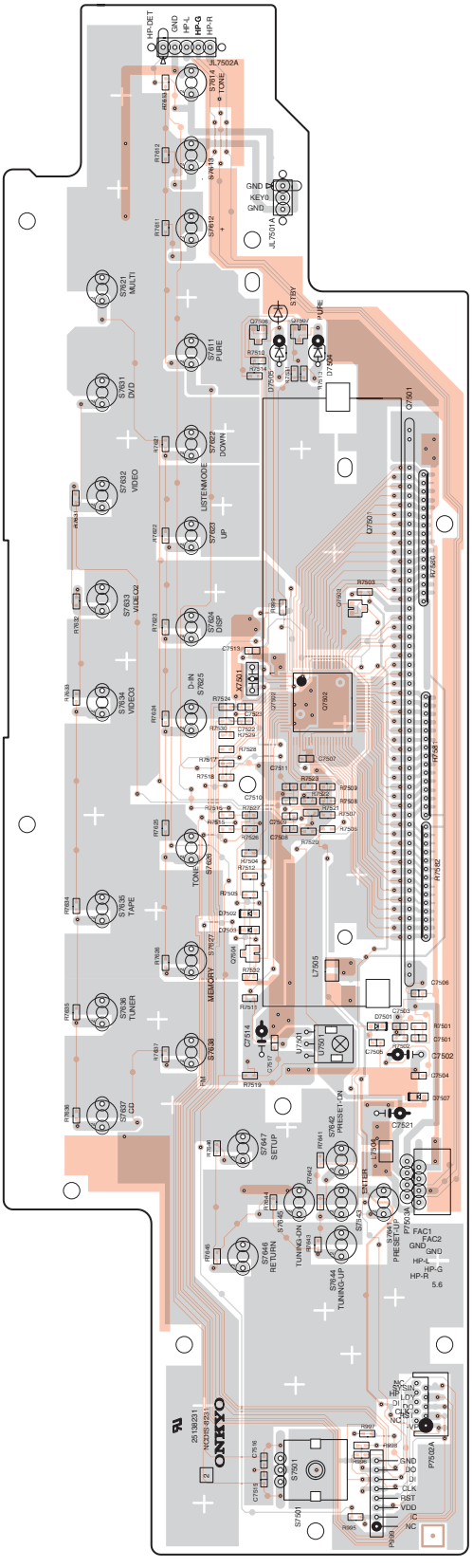
A B C D

1 2 3 4 5

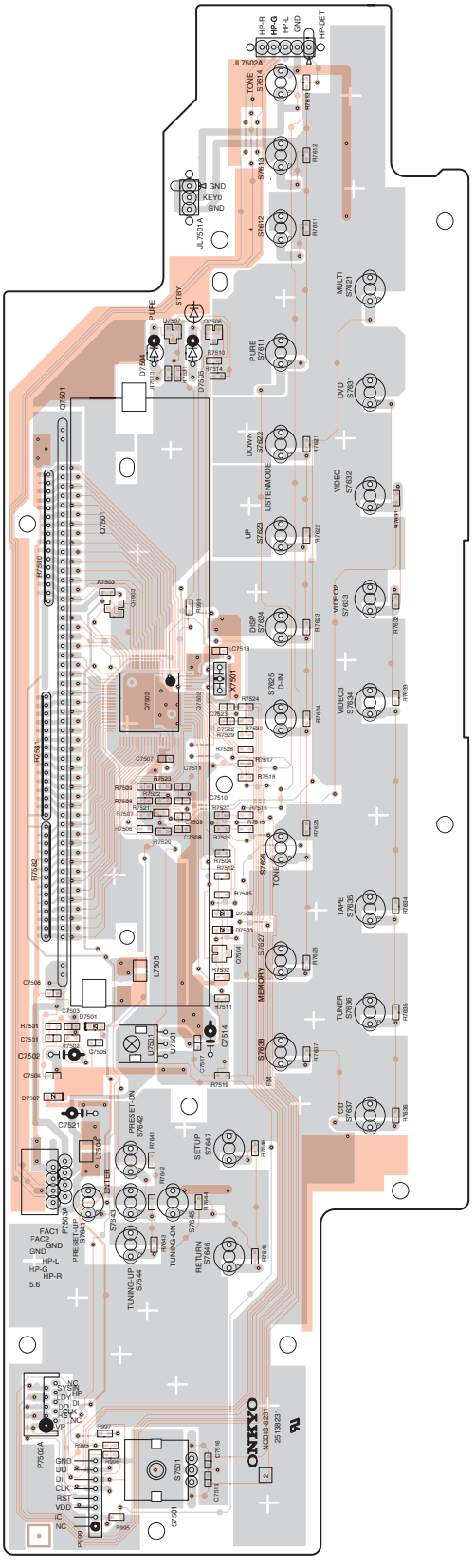
PRINTED CIRCUIT BOARD VIEWS-3

U02 DISPLAY PC BOARD (NADIS-8231)

Component side



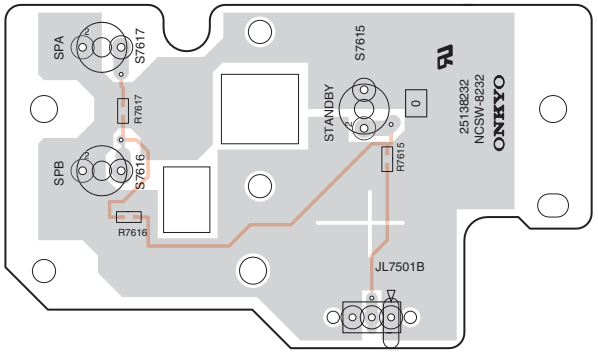
Soldering side



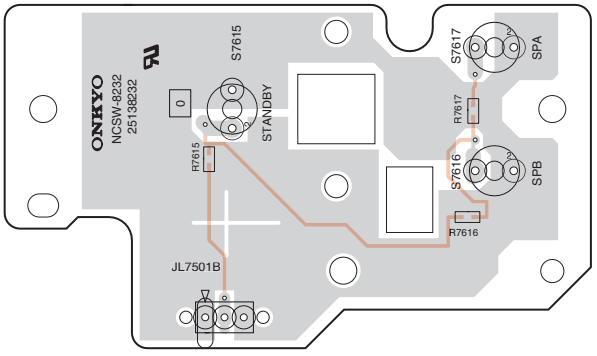
PRINTED CIRCUIT BOARD VIEWS-4

U03 OPERATION SWITCH PC BOARD (NASW-8232)

Component side

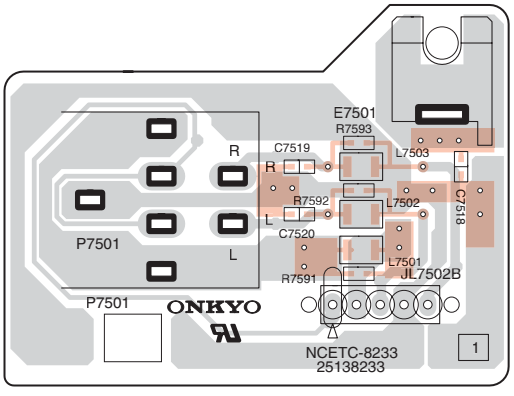


Soldering side

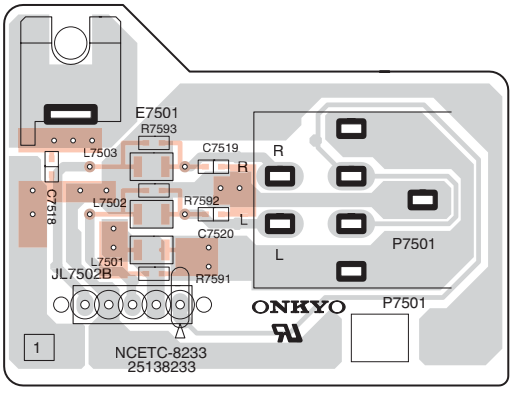


U04 HEADPHONE TERMINAL PC BOARD (NAETC-8233)

Component side



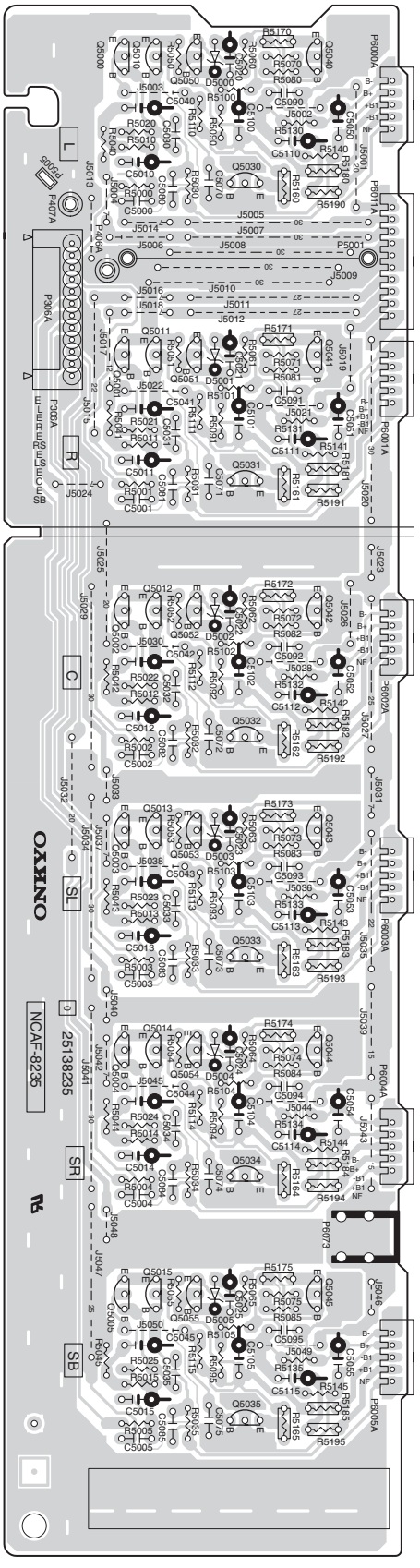
Soldering side



PRINTED CIRCUIT BOARD VIEWS-5

U06 DRIVER AMPLIFIER PC BOARD (NAAF-8235)

Component side



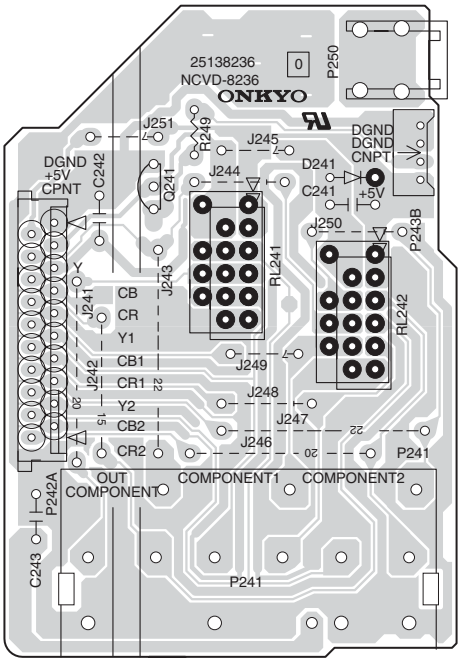
A B C D

1 2 3 4 5

PRINTED CIRCUIT BOARD VIEWS-6

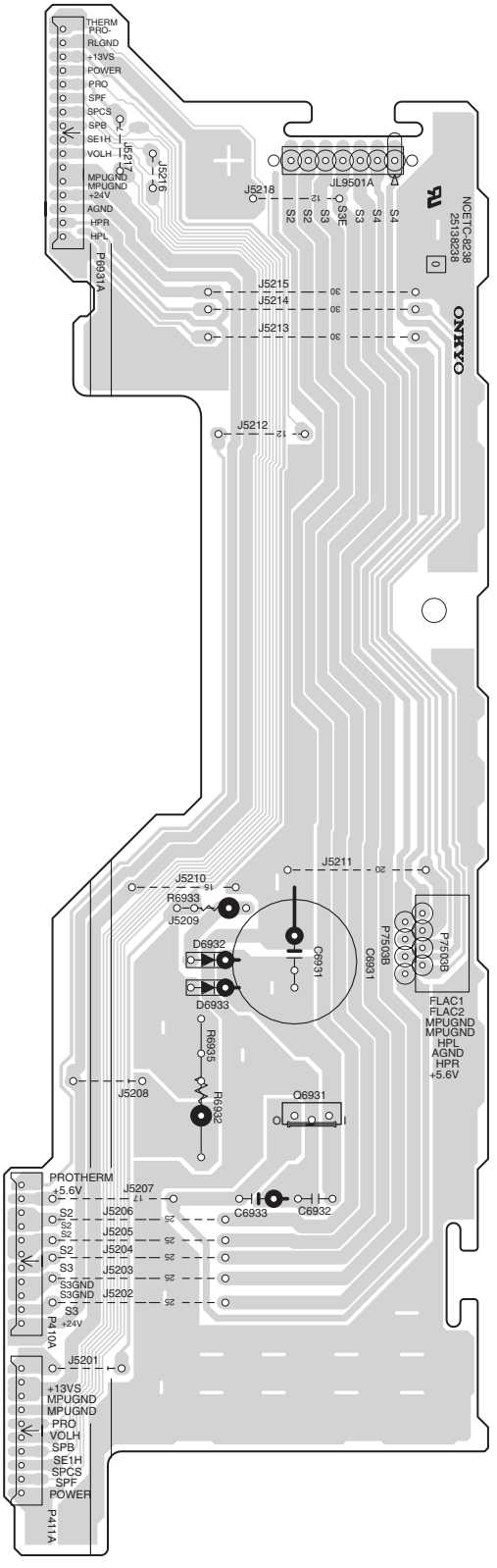
U07 COMPONENT VIDEO TERMINAL PC BOARD (NAVD-8236)

Component side



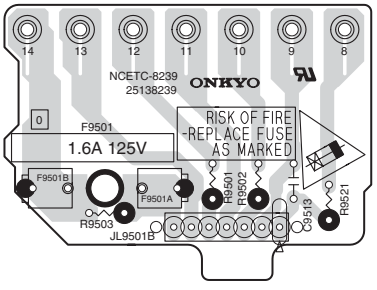
U09 REGULATOR PC BOARD (NAETC-8238)

Component side



U10 TERMINAL PC BOARD (NAETC-8239)

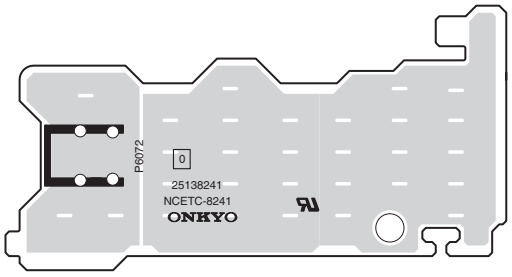
Component side



PRINTED CIRCUIT BOARD VIEWS-7

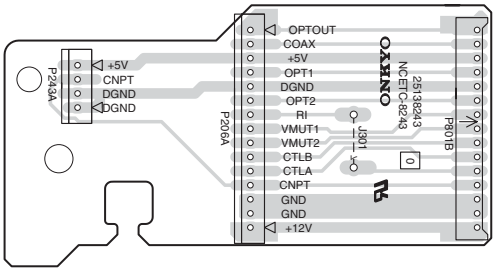
U12 HOLDER PC BOARD (NAETC-8241)

Component side



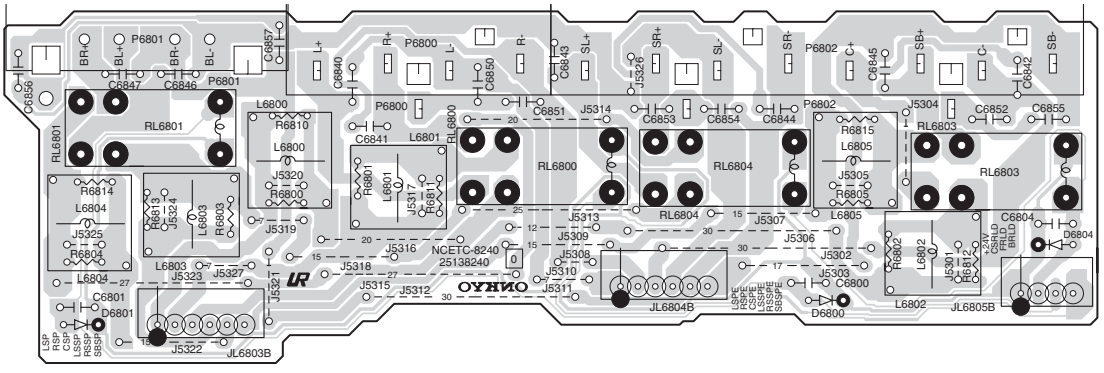
U14 TERMINAL PC BOARD (NAETC-8243)

Component side



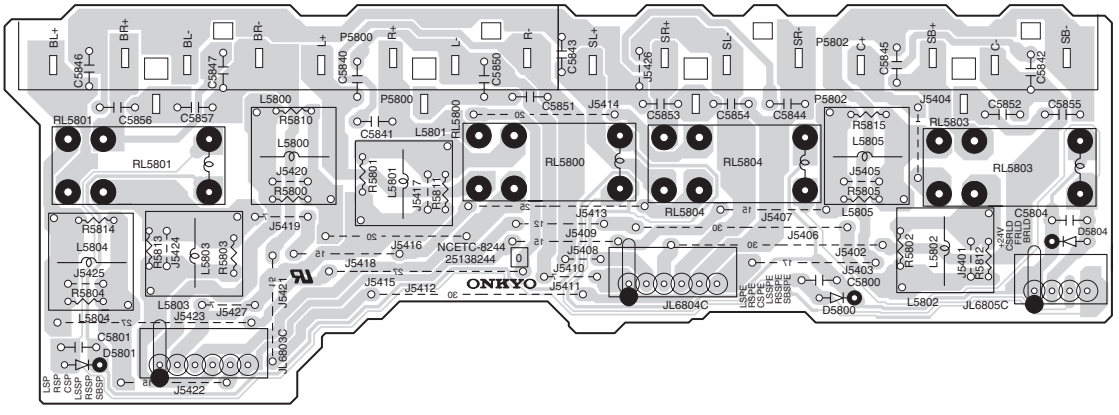
U11 SPEAKER TERMINAL PC BOARD (NAETC-8240) MDD, MDC type only

Component side



U15 SPEAKER TERMINAL PC BOARD (NAETC-8244) Except MDD,MDC type

Component side



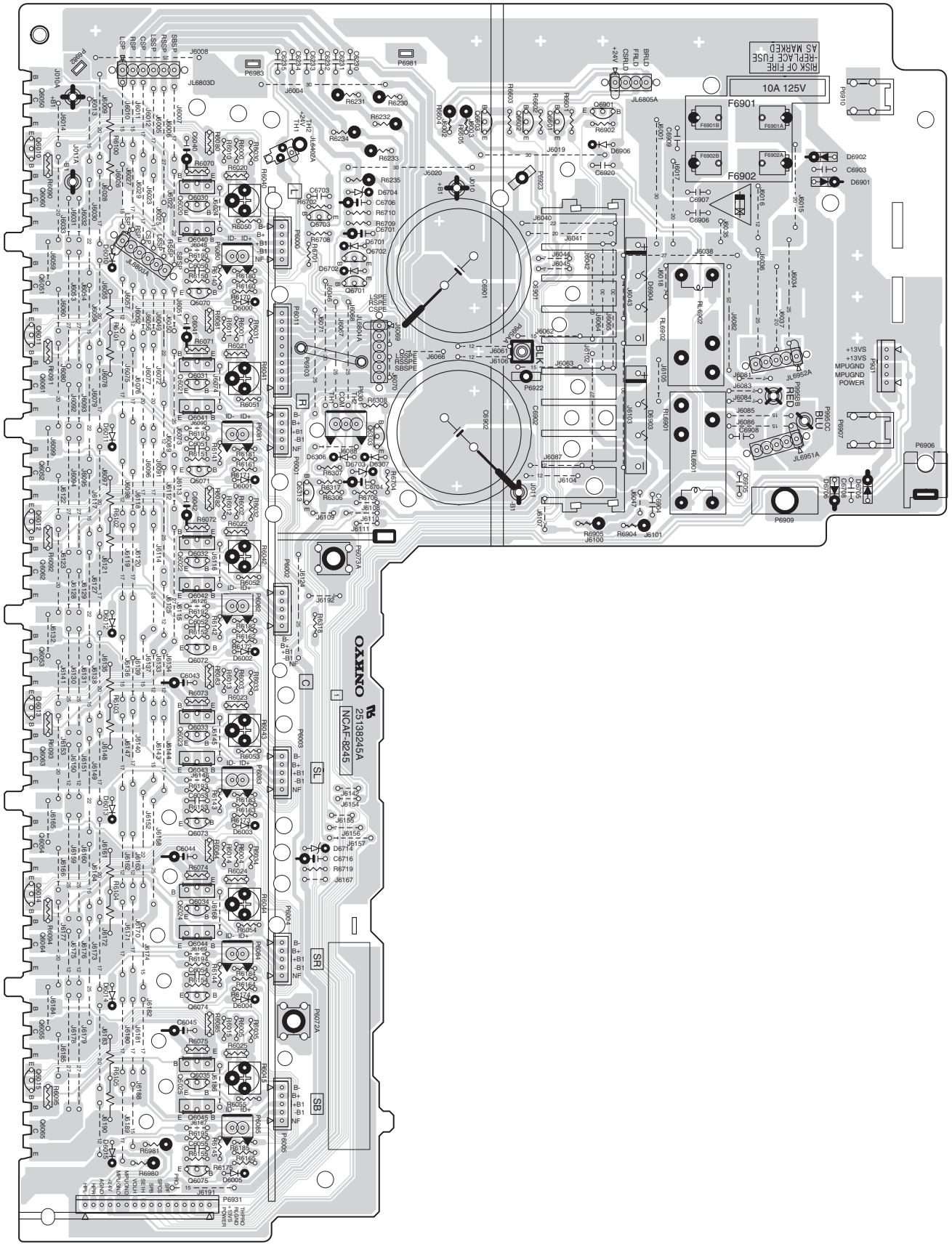
A B C D

1 2 3 4 5

PRINTED CIRCUIT BOARD VIEWS-8

U16 POWER AMPLIFIER PC BOARD (NAAF-8245)

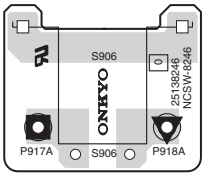
Component side



PRINTED CIRCUIT BOARD VIEWS-9

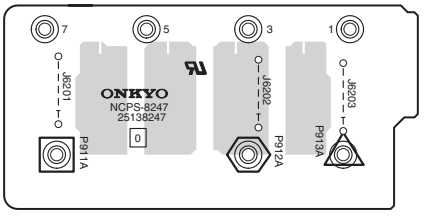
U17 POWER SWITCH PC BOARD (NASW-8246) Except MDD, MDC type

Component side



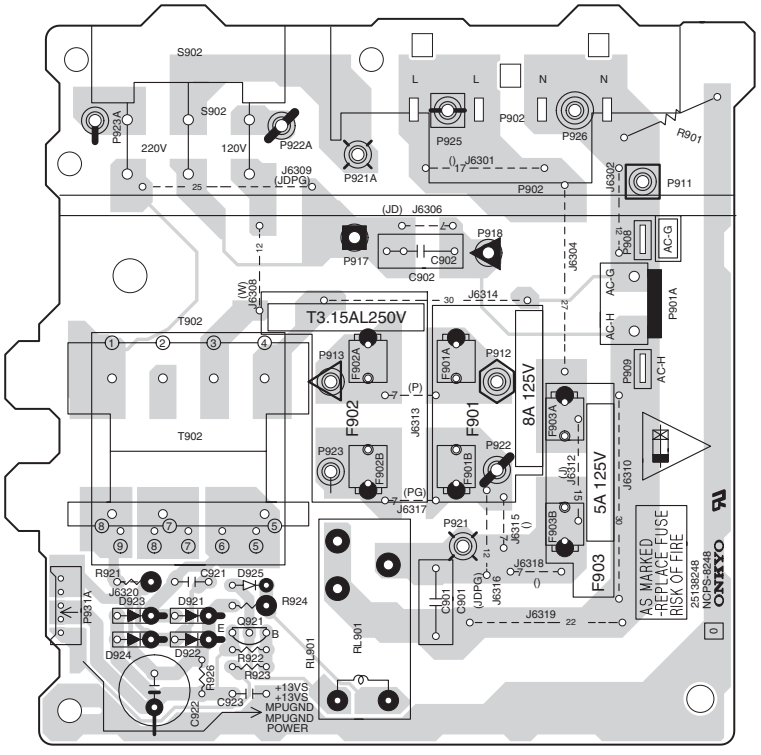
U18 TERMINAL PC BOARD (NAPS-8247)

Component side



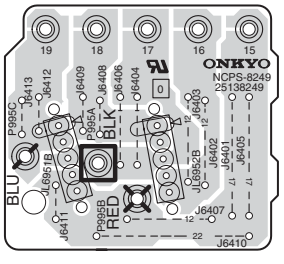
U19 POWER SUPPLY PC BOARD (NAPS-8248)

Component side



U20 TERMINAL PC BOARD (NAPS-8249)

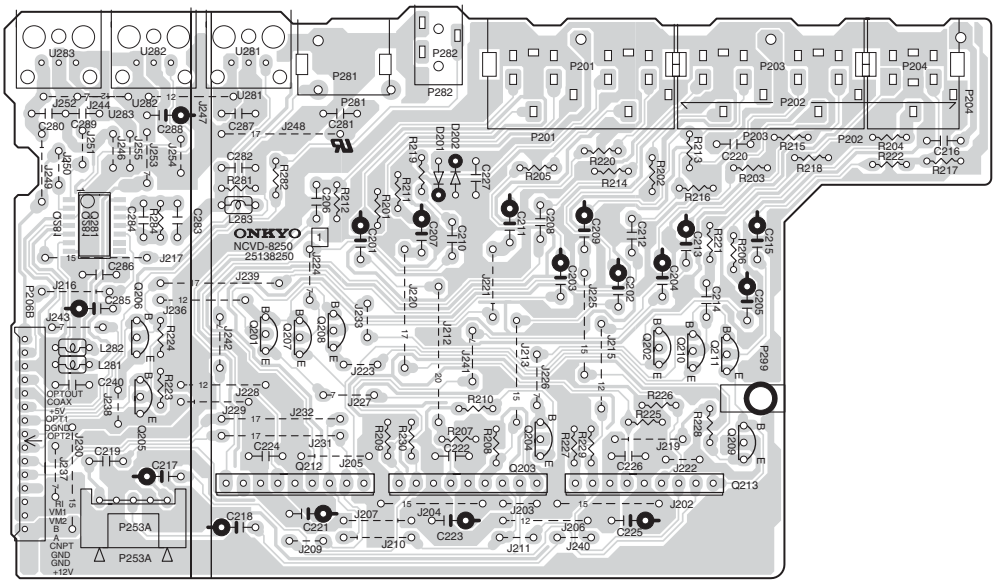
Component side



PRINTED CIRCUIT BOARD VIEWS-10

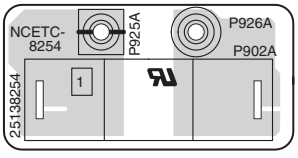
U21 VIDEO PC BOARD (NAVD-8250)

Component side



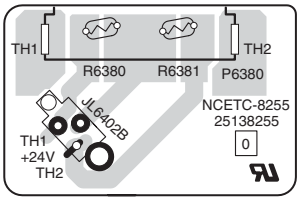
U25 OUTLET TERMINAL PC BOARD (NAETC-8254) MGK type only

Component side



U26 THERMAL SENSOR PC BOARD (NAETC-8255)

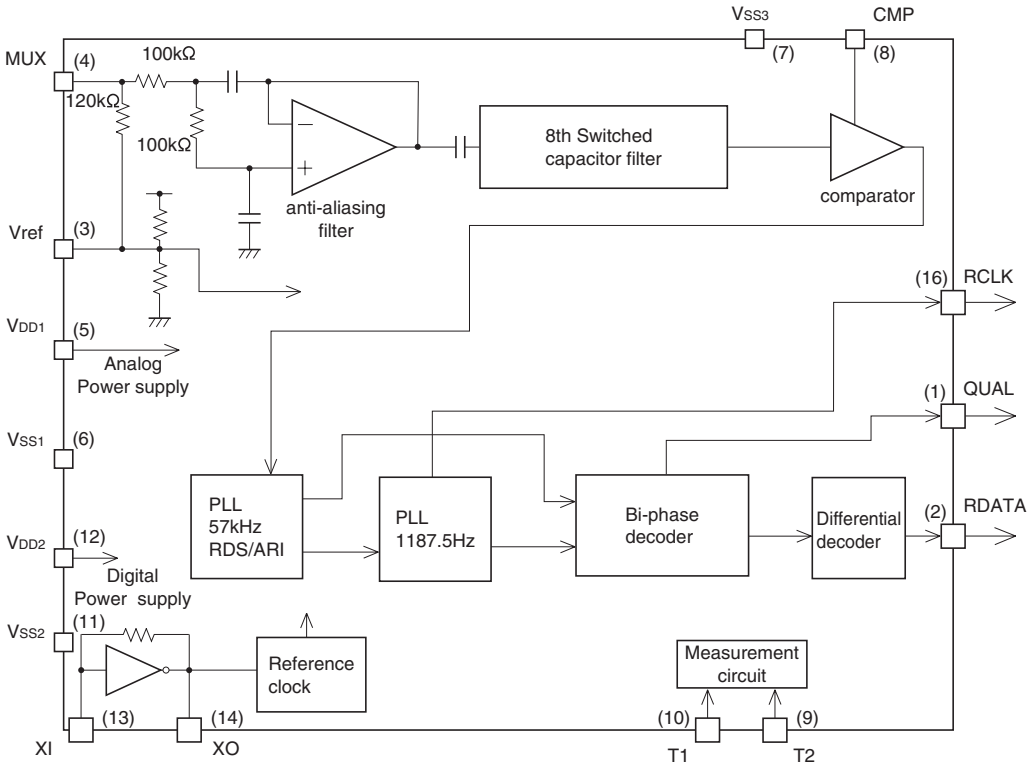
Component side



IC BLOCK DIAGRAM AND TERMINAL DESCRIPTIONS-1

Q181: BU1924FS (RDS decoder)-1

BLOCK DIAGRAM



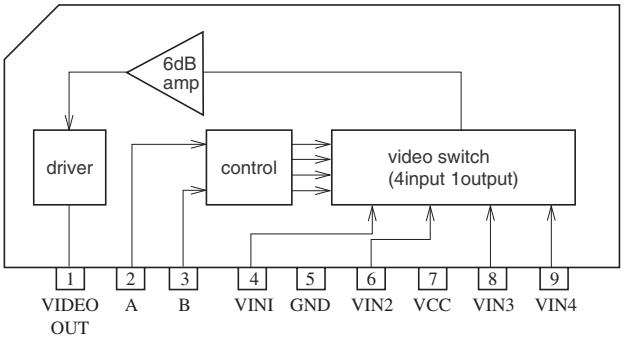
TERMINAL DESCRIPTION

Pin No.	Pin name	Description
1	QUAL	Output terminal of demodulator quality signal.
2	RDATA	Output terminal of demodulator data.
3	Vref	Input terminal of reference voltage.
4	MUX	Input terminal of composite signal.
5	V_{DD1}	Analog power supply.
6	V_{SS1}	Analog power supply.
7	V_{SS3}	Ground.
8	CMP	Input terminal of comparator.
9	T2	Input terminal for test mode.
10	T1	Input terminal for test mode.
11	V_{SS2}	Digital power supply.
12	V_{DD2}	Digital power supply.
13	XI	Connect to oscillator.
14	XO	Connect to oscillator.
15	(N.C.)	---
16	RCLK	Output terminal of demodulator clock.

IC BLOCK DIAGRAM AND TERMINAL DESCRIPTIONS-2

Q212,213: LA7956 (Video switch)

BLOCK DIAGRAM



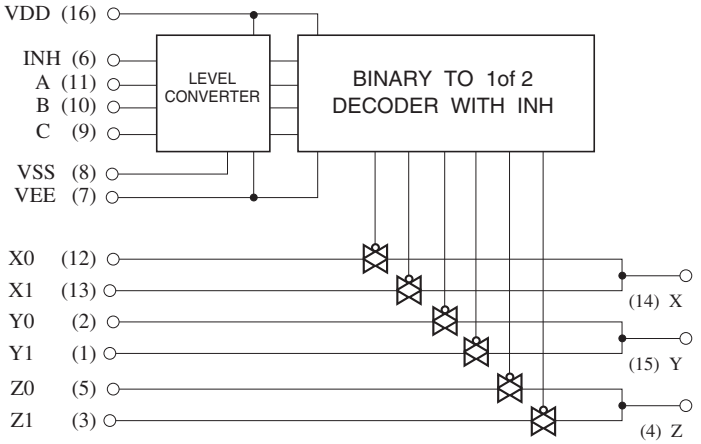
TRUTH TABLE

S2 (Pin 2)	S3 (Pin 3)	Vin1 (Pin 4)	Vin2 (Pin 6)	Vin3 (Pin 8)	Vin4 (Pin 9)
H	H	ON	OFF	OFF	OFF
L	H	OFF	ON	OFF	OFF
H	L	OFF	OFF	ON	OFF
L	L	OFF	OFF	OFF	ON

IC BLOCK DIAGRAM AND TERMINAL DESCRIPTIONS-3

Q291: BU4053B (Triple 2- channel analog multiplexer/ demultiplexer)

BLOCK DIAGRAM



TRUTH TABLE

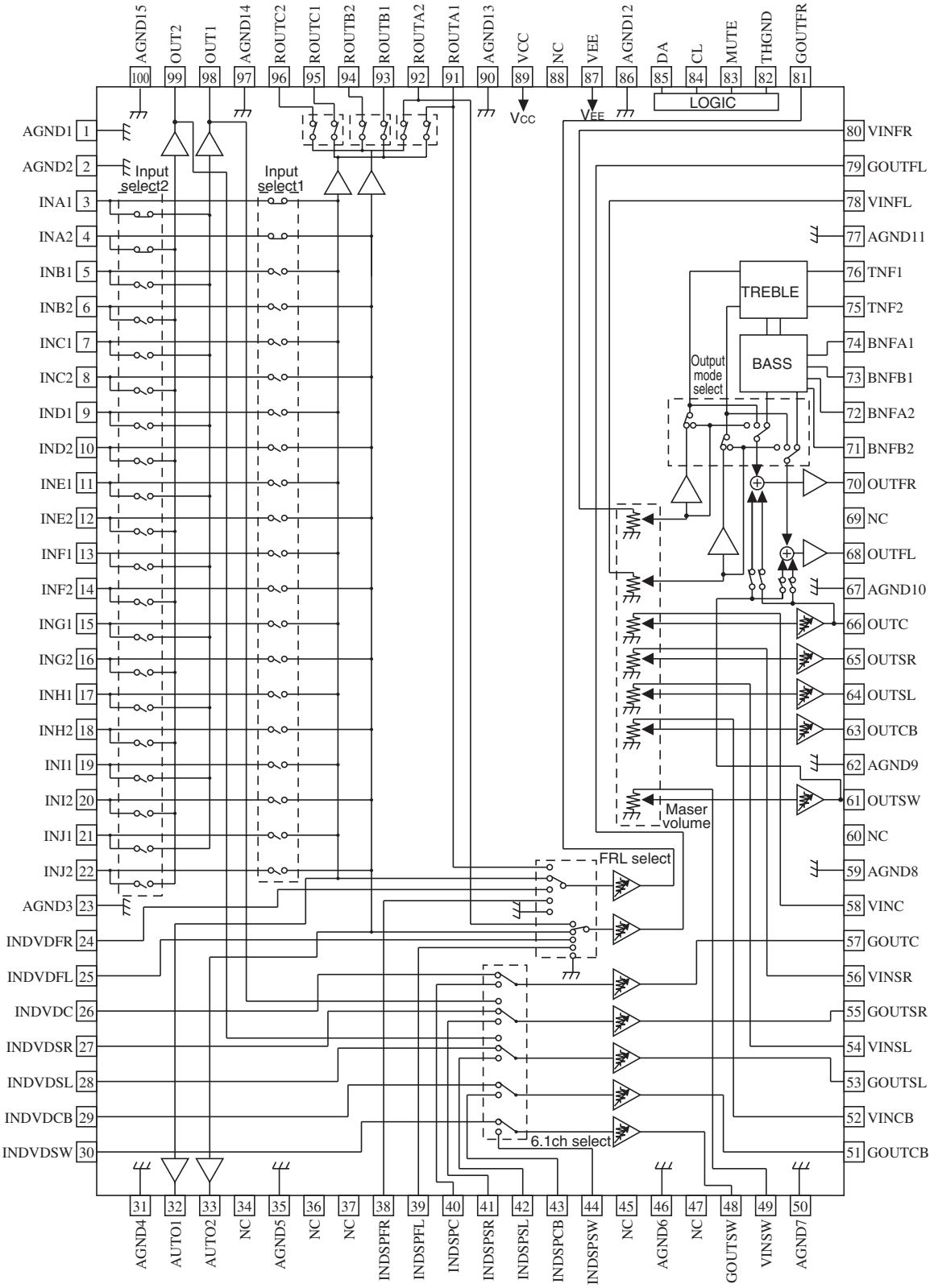
INH	A	B	C	ON SWITCH
L	L	L	L	X_0 Y_0 Z_0
L	H	L	L	X_1 Y_0 Z_0
L	L	H	L	X_0 Y_1 Z_0
L	H	H	L	X_1 Y_1 Z_0
L	L	L	H	X_0 Y_0 Z_1
L	H	L	H	X_1 Y_0 Z_1
L	L	H	H	X_0 Y_1 Z_1
L	H	H	H	X_1 Y_1 Z_1
H	X	X	X	NONE

X:lrrelevant

IC BLOCK DIAGRAM AND TERMINAL DESCRIPTIONS-4

Q301: BD3817KS (7ch Volume with 10ch input selector)-1

BLOCK DIAGRAM



IC BLOCK DIAGRAM AND TERMINAL DESCRIPTIONS-5

Q301: BD3817KS (7ch Volume with 10ch input selector)-2

TERMINAL DESCRIPTION

Pin No.	Pin Name	Description
1	AGND1	Analog ground terminal
2	AGND2	Analog ground terminal
3	INA1	1ch input terminal A
4	INA2	2ch input terminal A
5	INB1	1ch input terminal B
6	INB2	2ch input terminal B
7	INC1	1ch input terminal C
8	INC2	2ch input terminal C
9	IND1	1ch input terminal D
10	IND2	2ch input terminal D
11	INE1	1ch input terminal E
12	INE2	2ch input terminal E
13	INF1	1ch input terminal F
14	INF2	2ch input terminal F
15	ING1	1ch input terminal G
16	ING2	2ch input terminal G
17	INH1	1ch input terminal H
18	INH2	2ch input terminal H
19	INI1	1ch input terminal I
20	INI2	2ch input terminal I
21	INJ1	1ch input terminal J
22	INJ2	2ch input terminal J
23	AGND3	Analog ground terminal
24	INDVDFR	FRch DVD input terminal
25	INDVDFL	FLch DVD input terminal
26	INDVDC	Cch DVD input terminal
27	INDVDSR	SRch DVD input terminal
28	INDVDSL	SLch DVD input terminal
29	INDVDCB	CBch DVD input terminal
30	INDVDSW	SWch DVD input terminal
31	AGND4	Analog ground terminal
32	AOUT1	1ch A/D output terminal
33	AOUT2	2ch A/D output terminal
34	NC	Non-connected terminal
35	AGND5	Analog ground terminal
36	NC	Non-connected terminal
37	NC	Non-connected terminal
38	INDSPFR	FRch DSP input terminal
39	INDSPFL	FLch DSP input terminal
40	INDSPC	Cch DSP input terminal
41	INDSPSR	SRch DSP input terminal
42	INDSPSL	SLch DSP input terminal
43	INDSPCB	CBch DSP input terminal

Pin No.	Pin name	Description
44	INDSPSW	SWch DSP input terminal
45	NC	Non-connected terminal
46	AGND6	Analog ground terminal
47	NC	Non-connected terminal
48	GOUTSW	SWch input gain output terminal
49	VINSW	SWch volume input terminal
50	AGND7	Analog ground terminal
51	GOUTCB	CBch input gain output terminal
52	VINCB	CBch volume input terminal
53	GOUTSL	SLch input gain output terminal
54	VINSL	SLch volume input terminal
55	GOUTSR	SRch input gain output terminal
56	VINSR	SRch volume input terminal
57	GOUTC	Cch input gain output terminal
58	VINC	Cch volume input terminal
59	AGND8	Analog ground terminal
60	NC	Non-connected terminal
61	OUTSW	SWch output terminal
62	AGND9	Analog ground terminal
63	OUTCB	CBch output terminal
64	OUTSL	SLch output terminal
65	OUTSR	SRch output terminal
66	OUTC	Cch output terminal
67	AGND10	Analog ground terminal
68	OUTFL	FLch output terminal
69	NC	Non-connected terminal
70	OUTFR	FRch output terminal
71	BNFB2	2ch bass filter terminal B
72	BNFA2	2ch bass filter terminal A
73	BNFB1	1ch bass filter terminal B
74	BNFA1	1ch bass filter terminal A
75	TNF2	2ch treble filter terminal
76	TNF1	1ch treble filter terminal
77	AGND11	Analog ground terminal
78	VINFL	FLch volume input terminal
79	GOUTFL	FLch input gain output terminal
80	VINFR	FRch volume input terminal
81	GOUTFR	FRch input gain output terminal
82	THGND	Comparator ground terminal
83	MUTE	Mute terminal
84	CL	Serial clock input terminal
85	DA	Serial data and latch input terminal
86	AGND12	Analog ground terminal

IC BLOCK DIAGRAM AND TERMINAL DESCRIPTIONS-6

Q301: BD3817KS (7ch Volume with 10ch input selector)-3

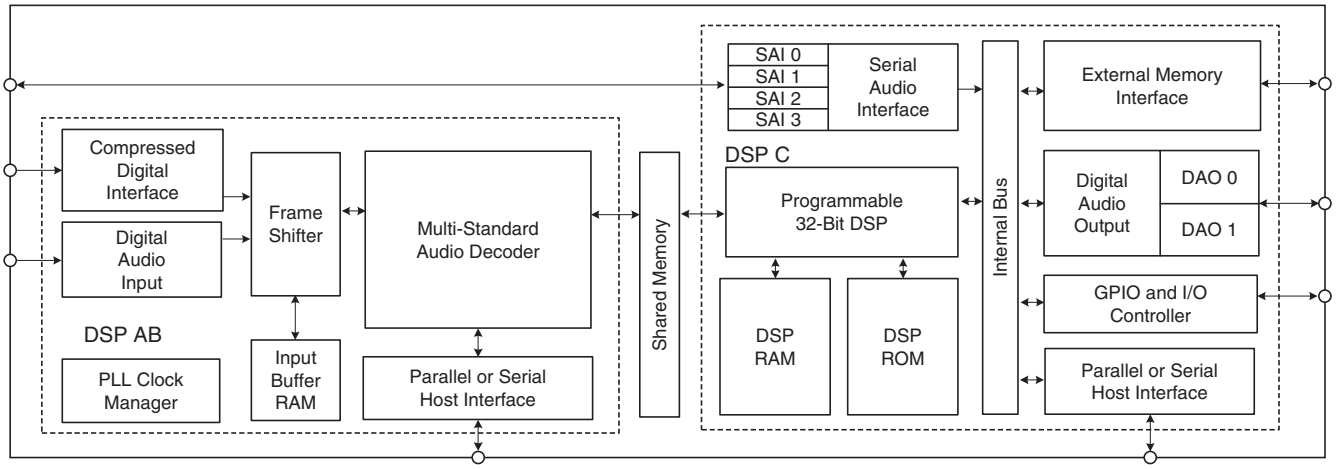
TERMINAL DESCRIPTION

Pin No.	Pin Name	Description
87	VEE	(-)Power supply terminal
88	NC	Non-connected terminal
89	VCC	(+)Power supply terminal
90	AGND13	Analog ground terminal
91	ROUTA1	1ch REC input and output terminal A
92	ROUTA2	2ch REC input and output terminal A
93	ROUTB1	1ch REC output terminal B
94	ROUTB2	2ch REC output terminal B
95	ROUTC1	1ch REC output terminal C
96	ROUTC2	2ch REC output terminal C
97	OUT1	1ch output terminal
98	OUT2	2ch output terminal
99	AGND14	Analog ground terminal
100	AGND15	Analog ground terminal

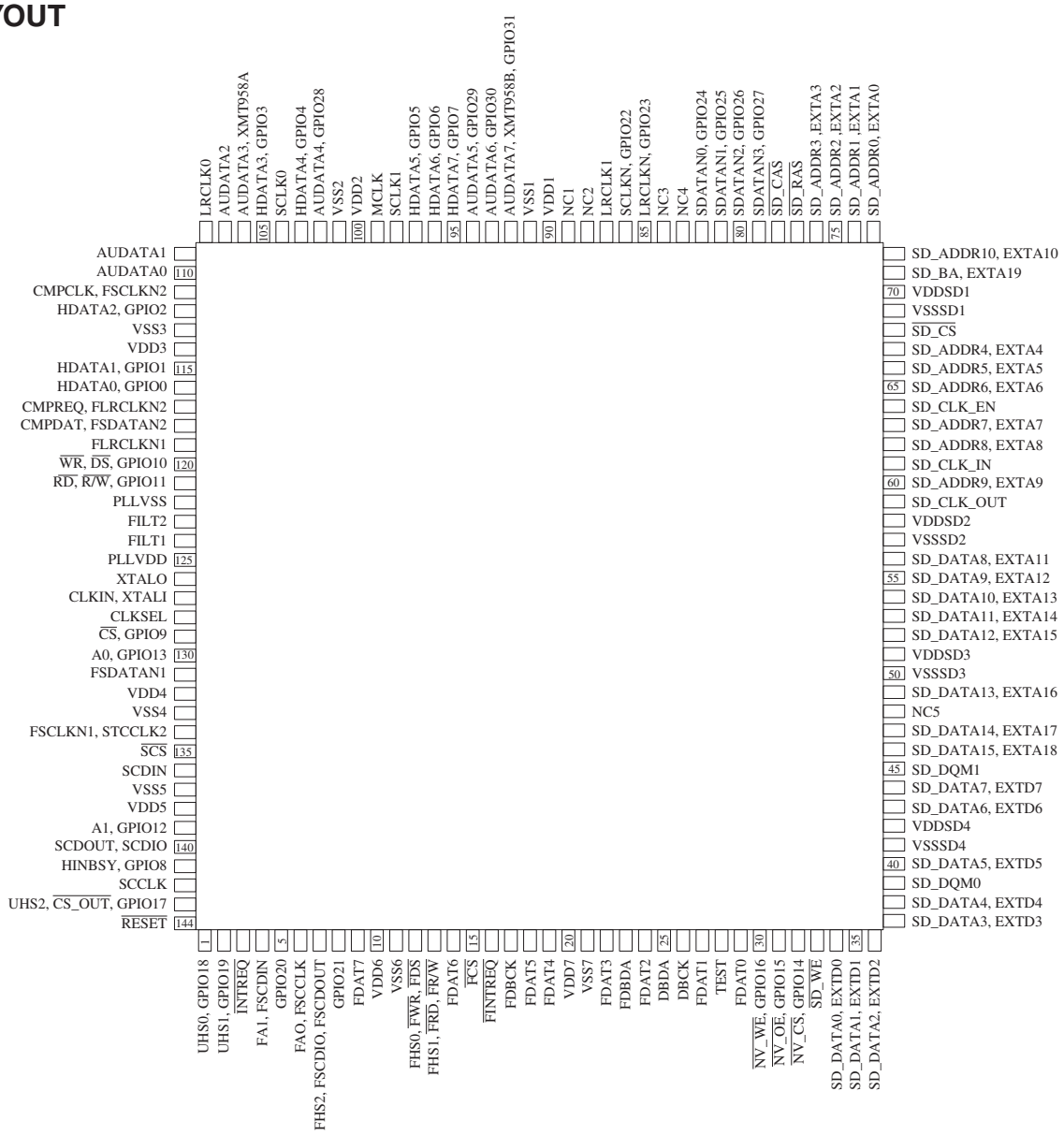
IC BLOCK DIAGRAM AND TERMINAL DESCRIPTIONS-7

Q701: CS494003CQZ (Multi-Standard Audio Decoder)-1

BLOCK DIAGRAM



PIN LAYOUT



IC BLOCK DIAGRAM AND TERMINAL DESCRIPTIONS-8

Q701: CS494003CQZ (Multi-Standard Audio Decoder)-2

TERMINAL DESCRIPTION

FILT1 - Phase-Locked Loop Filter
Connects to an external filter for the on-chip phase-locked loop.

FILT2 - Phase Locked Loop Filter
Connects to an external filter for the on-chip phase-locked loop.

CLKIN, XTALI - External Clock Input/Crystal Oscillator Input
CS494003 clock input. This pin accepts an external clock input signal that is used to drive the internal core logic. When in internal clock mode (CLKSEL == VSS), this input is connected to the internal PLL from which all internal clocks are derived. When in external clock mode (CLKSEL == VDD), this input is connected to the DSP clock. Alternatively, a 12.288 mhZ crystal oscillator can be connected between XTALI and XTALO. *INPUT*

XTALO - Crystal Oscillator Output
Crystal oscillator output. *OUTPUT*

CLKSEL - DSP Clock Select
This pin selects the internal source clock. When CLKSEL is low, CLKIN is connected to the internal PLL from which all internal clocks are derived. When CLKSEL is high, the PLL is bypassed and the external clock directly drives all input logic. *INPUT*

FDAT0~FDAT7 - DSPAB Bidirectional Data Bus
In parallel host mode, these pins provide a bidirectional data bus to DSPAB. These pins have an internal pull-up.
BIDIRECTIONAL - Default: INPUT

FA0, FSCCLK - Host Parallel Address Bit Zero or Serial Control Port Clock
In parallel host mode, this pin serves as one of two address input pins used to select one of four parallel registers. In serial host mode, this pin serves as the serial control clock signal, specifically as the SPI clock input. *INPUT*

FA1, FSCDIN - Host Address Bit One or SPI Serial Control Data Input
In parallel host mode, this pin serves as one of two address input pins used to select one of four parallel registers. In SPI serial host mode, this pin serves as the data input. *INPUT*

FHS1, $\overline{\text{FRD}}$, FR/$\overline{\text{W}}$ - Mode Select Bit 1 or Host Parallel Output Enable or Host Parallel R/$\overline{\text{W}}$
DSPAB control port mode select bit 1. This bit is one of 3 control port select bits that are sampled on the rising edge of $\overline{\text{RESET}}$ to determine the control port mode of DSPAB. In Intel parallel host mode, this pin serves as the active-low data bus enable input. In Motorola parallel host mode, this pin serves as the read-high/write-low control input signal. In serial host mode, this pin can serve as the external memory active-low data-enable output signal.
BIDIRECTIONAL - Default: INPUT

FHS0, $\overline{\text{FWR}}$, $\overline{\text{FDS}}$ - Mode Select Bit 0 or Host Write Strobe or Host Data Strobe
DSPAB control port mode select bit 0. This bit is one of 3 control port select bits that are sampled on the rising edge of $\overline{\text{RESET}}$ to determine the control port mode of DSPAB. In Intel parallel host mode, this pin serves as the active-low data-write-input strobe. In Motorola parallel host mode, this pin serves as the active-low data-strobe-input signal. In serial host mode, this pin can serve as the external-memory active-low write-enable output signal.
BIDIRECTIONAL - Default: INPUT

$\overline{\text{FCS}}$ - Host Parallel Chip Select, Host Serial SPI Chip Select
In parallel host mode, this pin serves as the active-low chip-select input signal. In serial host SPI mode, this pin is used as the active-low chip-select input signal. *INPUT*

FHS2, FSCDIO, FSCDOUT - Mode Select Bit 2 or Serial Control Port Data Input and Output, Parallel Port Type Select
DSPAB control port mode select bit 2. This bit is one of 3 control port select bits that are sampled on the rising edge of $\overline{\text{RESET}}$ to determine the control port mode of DSPAB. In SPI mode this pin serves as the data output pin. In parallel host mode, this pin is sampled at the rising edge of $\overline{\text{RESET}}$ to configure the parallel host mode as an Intel type bus or as a Motorola type bus. *BIDIRECTIONAL - Default: INPUT*

$\overline{\text{FINTREQ}}$ - Control Port Interrupt Request
Open-drain interrupt-request output. This pin is driven low to indicate that the DSP has outgoing control data that should be read by the host.
OPEN DRAIN I/O - Requires 3.3K Ohm Pull-Up

FSCLKN1, STCCLK2 - PCM Audio Input Bit Clock
Digital-audio bit clock input. FSCLKN1 operates asynchronously from all other DSPAB clocks. In master mode, FSCLKN1 is derived from DSPAB's internal clock generator. The active edge of FSCLKN1 can be programmed by the DSP.
BIDIRECTIONAL - Default: INPUT

IC BLOCK DIAGRAM AND TERMINAL DESCRIPTIONS-9

Q701: CS494003CQZ (Multi-Standard Audio Decoder)-3

TERMINAL DESCRIPTION

FLRCLKN1 - PCM Audio Input Sample Rate Clock

Digital-audio frame clock input. FLRCLKN1 typically is run at the sampling frequency. FLRCLKN1 operates asynchronously from all other DSPAB clocks. The polarity of FLRCLKN1 for a particular subframe can be programmed by the DSP.
BIDIRECTIONAL - Default: INPUT

FSDATAN1 - PCM Audio Data Input One

Digital-audio data input that can accept from one compressed line or 2 channels of PCM data. FSDATAN1 can be sampled with either edge of FSCLKN1, depending on how FSCLKN1 has been configured. *INPUT*

CMPCLK, FSCLKN2 - PCM Audio Input Bit Clock

Digital-audio bit clock input. FSCLKN2 operates asynchronously from all other DSPAB clocks. The active edge of FSCLKN2 can be programmed by the DSP.
BIDIRECTIONAL - Default: INPUT

CMPDAT, FSDATAN2 - PCM Audio Data Input Number Two

Digital-audio data input that can accept either one compressed line or 2 channels of PCM data. FSDATAN2 can be sampled with either edge of FSCLKN2, depending on how FSCLKN2 has been configured.
BIDIRECTIONAL - Default: INPUT

FDBCK - Reserved

This pin is reserved and should be pulled up with an external 3.3k resistor. *INPUT*

FDBDA - Reserved

This pin is reserved and should be pulled up with an external 3.3k resistor.
BIDIRECTIONAL - Default: INPUT

PLLVDD - PLL Supply Voltage

2.5 V PLL supply.

PLLVSS - PLL Ground Voltage

PLL ground.

$\overline{\text{RESET}}$ - Master Reset Input

Asynchronous active-low master reset input. Reset should be low at power-up to initialize the DSP and to guarantee that the device is not active during initial power-on stabilization periods. At the rising edge of reset the host interface mode of DSPAB is selected contingent on the state of the FHS0, FHS1, and FHS2 pins. At the rising edge of reset the host interface mode of DSPC is selected contingent on the state of the UHSO, UHS1, and UHS2 pins. If reset is low all bidirectional pins are high-Z inputs. *INPUT*

TEST - Reserved

This should be tied low for normal operation. *INPUT*

MCLK - Audio Master Clock

Bidirectional master audio clock. As an output, MCLK provides a low jitter oversampling clock.
MCLK supports all standard oversampling frequencies. *BIDIRECTIONAL - Default: INPUT*

SCLK0 - Audio Output Bit Clock

Bidirectional digital-audio output bit clock for AUDATA0, AUDATA1, AUDATA2, and AUDATA3.
As an output, SCLK0 can provide 32 Fs, 64 Fs, 128 Fs, 256 Fs, or 512 Fs frequencies and is synchronous to MCLK. As an input, SCLK0 is independent of MCLK.
BIDIRECTIONAL - Default: INPUT

SCLK1 - Audio Output Bit Clock

Bidirectional digital-audio output bit clock for AUDATA4, AUDATA5, AUDATA6, and AUDATA7.
As an output, SCLK1 can provide 32 Fs, 64 Fs, 128 Fs, 256 Fs, or 512 Fs frequencies and is synchronous to MCLK. As an input, SCLK1 is independent of MCLK.
BIDIRECTIONAL - Default: INPUT

LRCLK0 - Audio Output Sample Rate Clock

Bidirectional digital-audio output frame clock for AUDATA0, AUDATA1, AUDATA2, and AUDATA3. As an output, LRCLK0 can provide all standard output sample rates up to 192 kHz and is synchronous to MCLK. As an input, LRCLK0 is independent of MCLK.
BIDIRECTIONAL - Default: INPUT

IC BLOCK DIAGRAM AND TERMINAL DESCRIPTIONS-10

Q701: CS494003CQZ (Multi-Standard Audio Decoder)-4

TERMINAL DESCRIPTION

LRCLK1 - Audio Output Sample Rate Clock
Bidirectional digital-audio output frame clock for AUDATA4, AUDATA5, AUDATA6, and AUDATA7. As an output, LRCLK1 can provide all standard output sample rates up to 192 kHz and is synchronous to MCLK. As an input, LRCLK1 is independent of MCLK.
BIDIRECTIONAL - Default: INPUT

AUDATA0 - Digital Audio Output 0
PCM digital-audio data output. *OUTPUT*

AUDATA1 - Digital Audio Output 1
PCM digital-audio data output. *OUTPUT*

AUDATA2 - Digital Audio Output 2
PCM digital-audio data output. *OUTPUT*

AUDATA3, XMT958A - Digital Audio Output 3, S/PDIF Transmitter
CMOS level output that outputs a biphase-mark encoded (S/PDIF) IEC60958 signal or digital audio data which is capable of carrying two channels of PCM digital audio. *OUTPUT*

AUDATA4, GPIO28 - Digital Audio Output 4, General Purpose I/O
PCM digital-audio data output. This pin can act as a general-purpose input or output that can be individually configured and controlled by DSPC.
BIDIRECTIONAL - Default: OUTPUT

AUDATA5, GPIO29 - Digital Audio Output 5, General Purpose I/O
PCM digital-audio data output. This pin can act as a general-purpose input or output that can be individually configured and controlled by DSPC.
BIDIRECTIONAL - Default: OUTPUT

AUDATA6, GPIO30 - Digital Audio Output 6, General Purpose I/O
PCM digital-audio data output. This pin can act as a general-purpose input or output that can be individually configured and controlled by DSPC.
BIDIRECTIONAL - Default: OUTPUT

AUDATA7, XMT958B, GPIO3 - Digital Audio Output 7, S/PDIF Transmitter, General Purpose I/O
CMOS level output that contains a biphase-mark encoded (S/PDIF) IEC60958 signal or digital audio data which is capable of carrying two channels of PCM digital audio. This pin can also act as a general-purpose input or output that can be individually configured and controlled by DSPC.
BIDIRECTIONAL - Default: OUTPUT

DBCK - Debug Clock
Must be tied high to 3.3k ohm resistor. *INPUT*

DBDA - Debug Data
Must be tied high to 3.3k ohm resistor. *BIDIRECTIONAL - Default: INPUT*

SLCKN, GPIO22 - PCM Audio Input Bit Clock, General Purpose I/O
Digital-audio bit clock that is an input. SCLKN operates asynchronously from all other DSPAB clocks. The active edge of SCLKN can be programmed by the DSP. This pin can act as a eneral-purpose input or output that can be individually configured and controlled by DSPC.
BIDIRECTIONAL - Default: INPUT

LRCLKN, GPIO23 - PCM Audio Input Sample Rate Clock, General Purpose I/O
Digital-audio frame clock input. LRCLKN operates asynchronously from all other DSPAB clocks. The polarity of LRCLKN for a particular subframe can be programmed by the DSP. This pin can act as a general-purpose input or output that can be individually configured and controlled by DSPC.
BIDIRECTIONAL - Default: INPUT

SDATAN0, GPIO24 - PCM Audio Input Data, General Purpose I/O
Digital-audio PCM data input. This pin can act as a general-purpose input or output that can be individually configured and controlled by DSPC.
BIDIRECTIONAL - Default: INPUT

IC BLOCK DIAGRAM AND TERMINAL DESCRIPTIONS-11

Q701: CS494003CQZ (Multi-Standard Audio Decoder)-5

TERMINAL DESCRIPTION

SDATAN1, GPIO25 - PCM Audio Input Data, General Purpose I/O
Digital-audio PCM data input. This pin can act as a general-purpose input or output that can be individually configured and controlled by DSPC. *BIDIRECTIONAL - Default: INPUT*

SDATAN2, GPIO26 - PCM Audio Input Data, General Purpose I/O
Digital-audio PCM data input. This pin can act as a general-purpose input or output that can be individually configured and controlled by DSPC. *BIDIRECTIONAL - Default: INPUT*

SDATAN3, GPIO27 - PCM Audio Input Data, General Purpose I/O
Digital-audio PCM data input. This pin can act as a general-purpose input or output that can be individually configured and controlled by DSPC. *BIDIRECTIONAL - Default: INPUT*

$\overline{SCS}$ - Host Serial SPI Chip Select
SPI mode active-low chip-select input signal. *INPUT*

SCCLK - Serial Control Port Clock
This pin serves as the serial SPI clock input. *INPUT*

SCDIN - SPI Serial Control Data Input
In SPI mode this pin serves as the data input pin. *INPUT*

SCDOUT, SCDIO - Serial Control Port Data Input and Output
In SPI mode this pin serves as the data output pin. *BIDIRECTIONAL - Default: OUTPUT in SPI mode*

$\overline{INTREQ}$ - Control Port Interrupt Request
Open-drain interrupt-request output. This pin is driven low to indicate that DSPC has outgoing control data and should be serviced by the host. *OPEN DRAIN I/O - Requires 3.3K Ohm Pull-Up*

HDATA1~HDATA7, GPIO1~GPIO7 - DSPC Bidirectional Data Bus, General Purpose I/O

HDATA0, GPIO0
In parallel host mode, these pins provide a bidirectional data bus. These pins can also act as general purpose input or output pins that can be individually configured and controlled by DSPC. These pins have an internal pull-up. *BIDIRECTIONAL - Default: INPUT*

A0, GPIO13 - Host Parallel Address Bit 0, General Purpose I/O
In parallel host mode, this pin serves as the LS Bit of a two bit address input used to select one of four parallel registers. This pin can act as a general-purpose input or output that can be individually configured and controlled by DSPC. *BIDIRECTIONAL - Default: INPUT*

A1, GPIO12 - Host Address Bit 1, General Purpose I/O
In parallel host mode, this pin serves as the MS Bit of a two bit address input used to select one of four parallel registers. This pin can act as a general-purpose input or output that can be individually configured and controlled by DSPC. *BIDIRECTIONAL - Default: INPUT*

$\overline{RD}$, R/$\overline{W}$, GPIO11 - Host Parallel Output Enable, Host Parallel R/$\overline{W}$, General Purpose I/O
In Intel parallel host mode, this pin serves as the active-low data bus enable input. In Motorola parallel host mode, this pin serves as the read-high/write-low control input signal. This pin can act as a general-purpose input or output that can be individually configured and controlled by DSPC. This pin has an internal pull-up. *BIDIRECTIONAL - Default: INPUT*

$\overline{WR}$, $\overline{DS}$, GPIO10 - Host Write Strobe, Host Data Strobe, General Purpose I/O
In Intel parallel host mode, this pin serves as the active-low data bus enable input. In Motorola parallel host mode, this pin serves as the read-high/write-low control input signal. In serial host mode, this pin can serve as a general purpose input or output bit. This pin can act as a general-purpose input or output that can be individually configured and controlled by DSPC. This pin has an internal pull-up. *BIDIRECTIONAL - Default: INPUT*

$\overline{CS}$, GPIO9 - Host Parallel Chip Select, General Purpose I/O
In parallel host mode, this pin serves as the active-low chip-select input signal. This pin can act as a general-purpose input or output that can be individually configured and controlled by DSPC. This pin has an internal pull-up. *BIDIRECTIONAL - Default: INPUT*

HINBSY, GPIO8 - Input Host Message Status, General Purpose I/O
This pin indicates that serial or parallel communication data written to the DSP has not been read yet. This pin can act as a general-purpose input or output that can be individually configured and controlled by DSPC. This pin has an internal pull-up. *BIDIRECTIONAL - Default: OUTPUT*

SD_DATA8~SD_DATA15, EXTA11~EXTA18 - SDRAM Data Bus, SRAM External Address Bus
SDRAM data bus 15:8. SRAM external address bus 18:11. *OUTPUT*

IC BLOCK DIAGRAM AND TERMINAL DESCRIPTIONS-12

Q701: CS494003CQZ (Multi-Standard Audio Decoder)-6

TERMINAL DESCRIPTION

SD_DATA0~SD_DATA7, EXTD0~EXTD7 - SDRAM Data Bus, SRAM External Data Bus
SDRAM data bus 7:0. SRAM external data bus 7:0. *BIDIRECTIONAL - Default: INPUT*

SD_ADDR0~SD_ADDR10, EXTA0~EXTA10 - SDRAM Address Bus, SRAM External Address Bus
SDRAM address bus 10:0. SRAM external address bus 10:0. *OUTPUT*

SD_CLK_OUT - SDRAM Clock Output
SDRAM clock output. *OUTPUT*

SD_CLK_IN - SDRAM Re-timing Clock Input
SDRAM re-timing clock input. *INPUT*

SD_CLK_EN - SDRAM Clock Enable
SDRAM clock enable. *OUTPUT*

SD_BA, EXTA19 - SDRAM Bank Address Select, SRAM External Address Bus
SDRAM bank address select. SRAM external address bus 19. *OUTPUT*

$\overline{\text{SD\_CS}}$ - SDRAM Chip Select
SDRAM chip select. *OUTPUT*

$\overline{\text{SD\_RAS}}$ - SDRAM Row Address Strobe
SDRAM row address strobe. *OUTPUT*

$\overline{\text{SD\_CAS}}$ - SDRAM Column Address Strobe
SDRAM column address strobe. *OUTPUT*

$\overline{\text{SD\_WE}}$ - SDRAM Write Enable
SDRAM write enable. *OUTPUT*

SD_DQM1 - SDRAM Data Mask 1
SDRAM data mask 1. *OUTPUT*

SD_DQM0 - SDRAM Data Mask 2
SDRAM data mask 0. *OUTPUT*

$\overline{\text{NV\_CS}}$, GPIO14 - SRAM Chip Select, General Purpose I/O
SRAM/FLASH chip select. This pin can act as a general-purpose input or output that can be individually configured and controlled by DSPC.
BIDIRECTIONAL - Default: OUTPUT

$\overline{\text{NV\_OE}}$, GPIO15 - SRAM Output Enable, General Purpose I/O
SRAM/FLASH output enable. This pin can act as a general-purpose input or output that can be individually configured and controlled by DSPC.
BIDIRECTIONAL - Default: OUTPUT

$\overline{\text{NV\_WE}}$, GPIO16 - SRAM Write Enable, General Purpose I/O
SRAM/FLASH write enable. This pin can act as a general-purpose input or output that can be individually configured and controlled by DSPC.
BIDIRECTIONAL - Default: OUTPUT

UHS2, CS_OUT, GPIO17 - Mode Select Bit 2, External Serial Memory Chip Select, General Purpose I/O
DSPC control port mode select bit 2. This pin is sampled at the rising edge of $\overline{\text{RESET}}$ and is one of three pins used to select the control port mode. In serial control port mode, this pin can serve as an output to provide the chip-select for a serial EEPROM. This pin can act as a general-purpose input or output that can be individually configured and controlled by DSPC.
BIDIRECTIONAL - Default: INPUT

IC BLOCK DIAGRAM AND TERMINAL DESCRIPTIONS-13

Q701: CS494003CQZ (Multi-Standard Audio Decoder)-7

TERMINAL DESCRIPTION

UHS0, GPIO18 - Mode Select Bit 0, General Purpose I/O

DSPC control port mode select bit 0. This pin is sampled at the rising edge of $\overline{\text{RESET}}$ and is ne of three pins used to select the control port mode. This pin can act as a general-purpose input or output that can be individually configured and controlled by DSPC.
BIDIRECTIONAL - Default: INPUT

UHS1, GPIO19 - Mode Select Bit 1, General Purpose I/O

DSPC control port mode select bit 1. This pin is sampled at the rising edge of $\overline{\text{RESET}}$ and is one of three pins used to select the control port mode. This pin can act as a general-purpose input or output that can be individually configured and controlled by DSPC.
BIDIRECTIONAL - Default: INPUT

GPIO20 - General Purpose I/O

This pin can act as a general-purpose input or output that can be individually configured and controlled by DSPC. This pin has an internal pull-up.
BIDIRECTIONAL - Default: INPUT

GPIO21 - General Purpose I/O

This pin can act as a general-purpose input or output that can be individually configured and controlled by DSPC.This pin has an internal pull-up.
BIDIRECTIONAL - Default: INPUT

VDD[7:1] - 2.5V Supply Voltage

2.5V supply voltage.

VSS - 2.5V Ground

2.5V ground.

NC[5:1] - No Connect

Recommended tie to ground.

VDDSD[4:1] - 3.3V SDRAM/SRAM/EPROM Interface Supply

3.3V SDRAM/SRAM/EPROM supply.

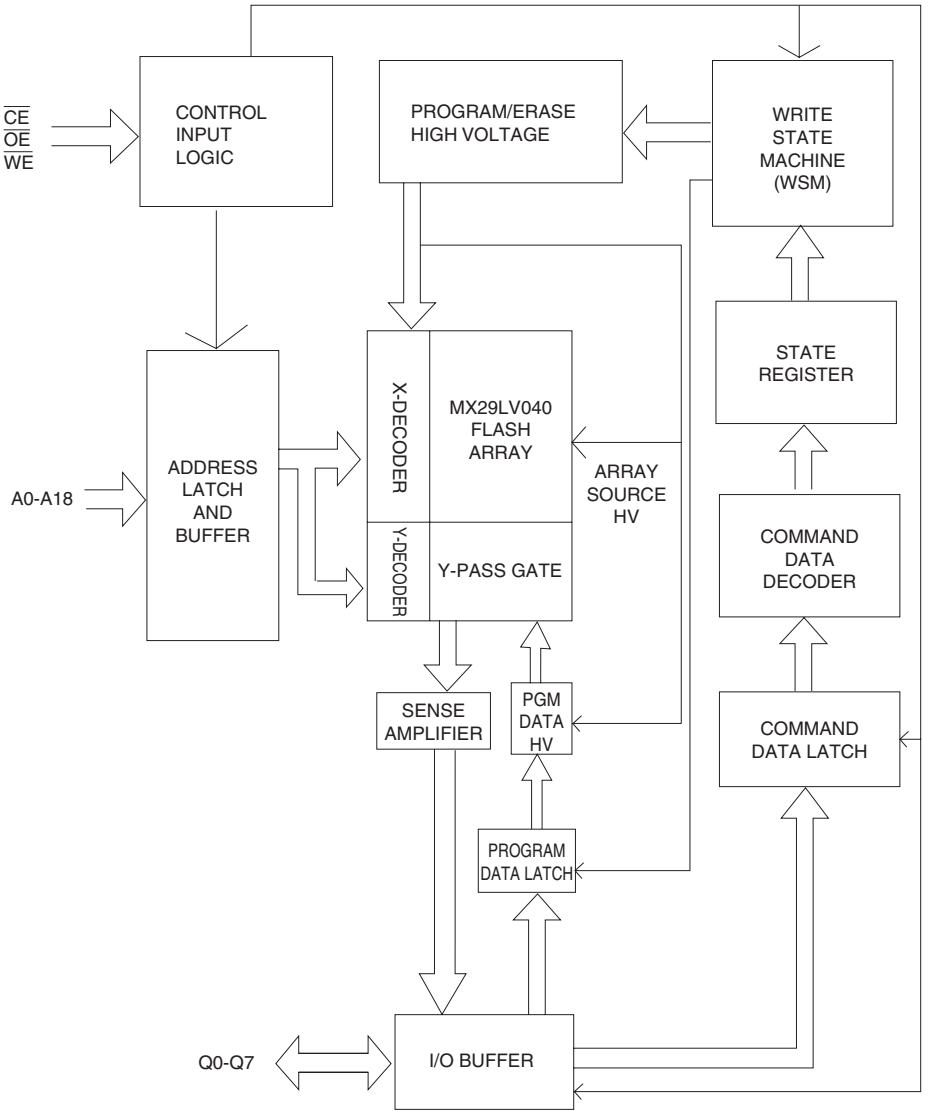
VSSSD - 3.3V SDRAM/SRAM/EPROM Interface Ground

3.3V ground.

IC BLOCK DIAGRAM AND TERMINAL DESCRIPTIONS-14

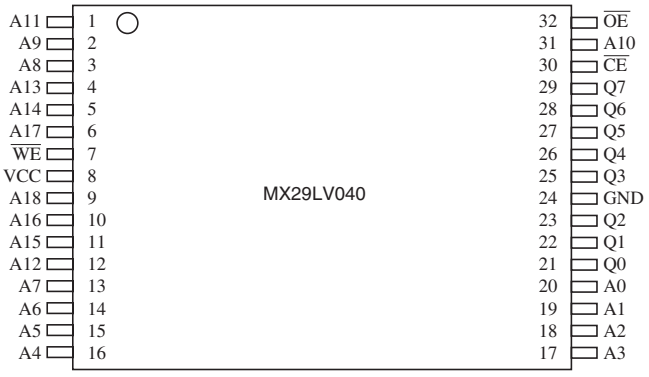
Q702: MX29LV040 (4M-Bit CMOS Single Voltage 3V Only Equal Sector Flash Memory)

BLOCK DIAGRAM



PIN LAYOUT

32 TSOP (Standard Type) (8mm x 20mm)



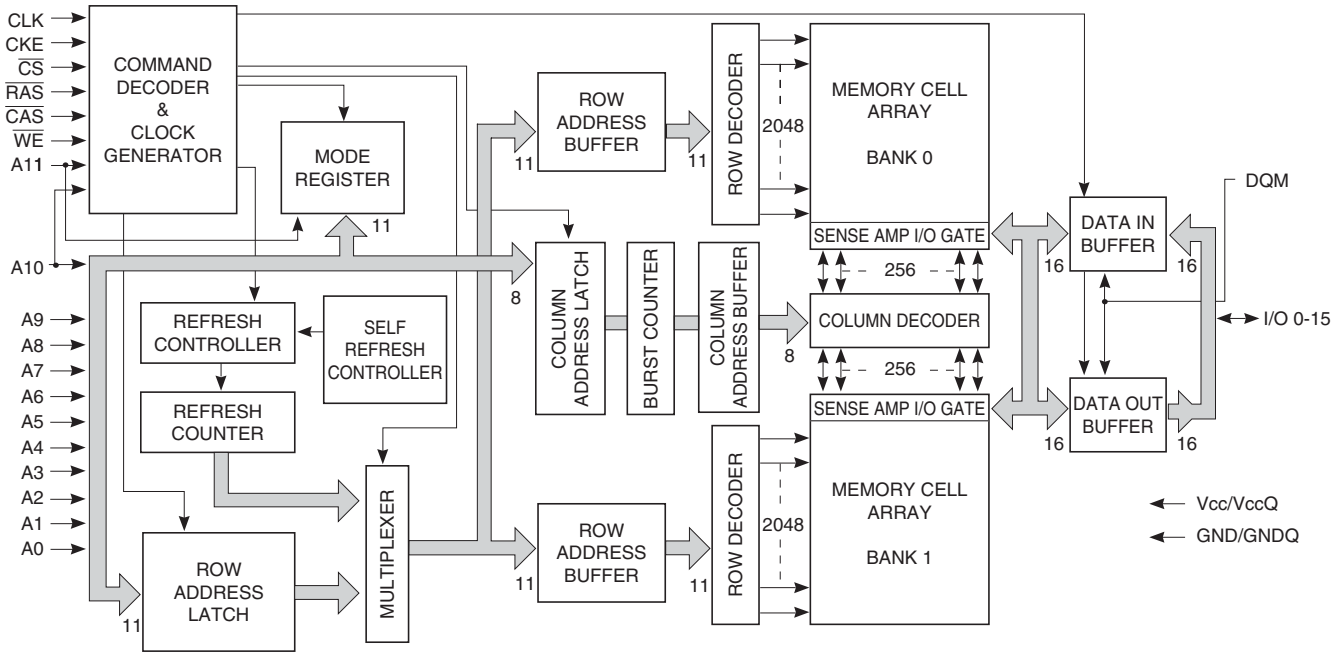
TERMINAL DESCRIPTION

Pin Name	Description
A0~A18	Address Input
Q0~Q7	Data Input/Output
$\overline{CE}$	Chip Enable Input
$\overline{WE}$	Write Enable Input
$\overline{OE}$	Output Enable Input
GND	Ground Pin
VCC	+3.0V single power supply

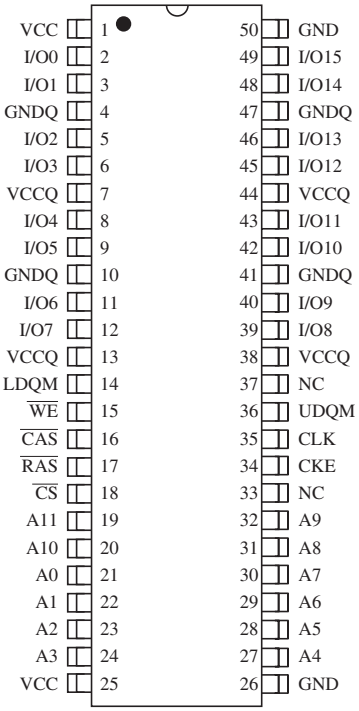
IC BLOCK DIAGRAM AND TERMINAL DESCRIPTIONS-15

Q7301: IC42S16100 (16-Mbit Synchronous Dynamic RAM)-1

BLOCK DIAGRAM



PIN LAYOUT



IC BLOCK DIAGRAM AND TERMINAL DESCRIPTIONS-16

Q7301: IC42S16100 (16-Mbit Synchronous Dynamic RAM)-2

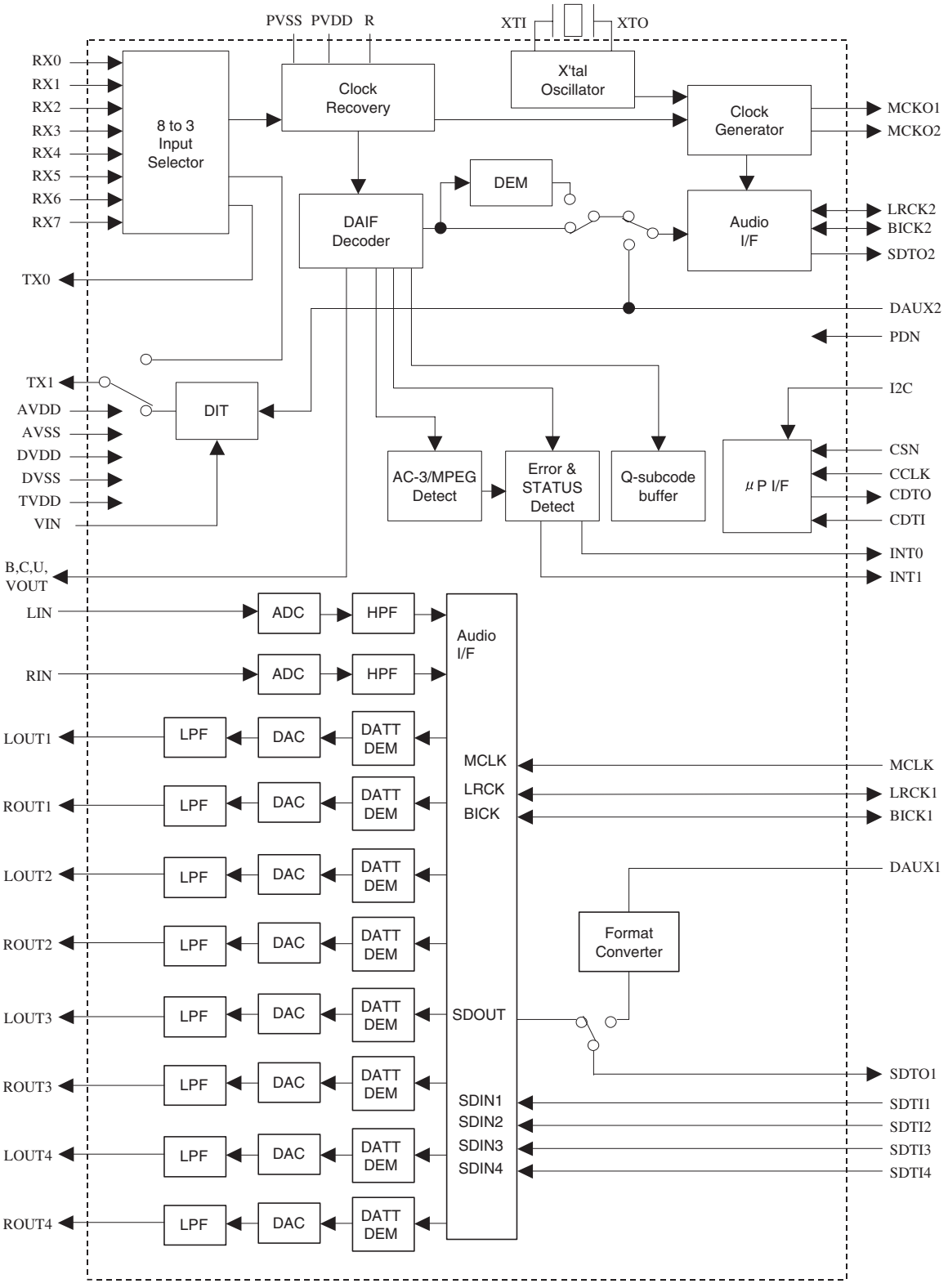
TERMINAL DESCRIPTION

Pin No.	Pin name	Function (In Detail)
20 to 24 27 to 32	A0-A10	A0 to A10 are address inputs. A0-A10 are used as row address inputs during active command input and A0-A7 as column address inputs during read or write command input. A10 is also used to determine the precharge mode during other commands. If A10 is LOW during precharge command, the bank selected by A11 is precharged, but if A10 is HIGH, both banks will be precharged. When A10 is HIGH in read or write command cycle, the precharge starts automatically after the burst access. These signals become part of the OP CODE during mode register set command input.
19	A11	A11 is the bank selection signal. When A11 is LOW, bank 0 is selected and when high, bank 1 is selected. This signal becomes part of the OP CODE during mode register set command input.
16	$\overline{CAS}$	$\overline{CAS}$, in conjunction with the $\overline{RAS}$ and $\overline{WE}$, forms the device command. See the "Command Truth Table" item for details on device commands.
34	CKE	The CKE input determines whether the CLK input is enabled within the device. When is CKE HIGH, the next rising edge of the CLK signal will be valid, and when LOW, invalid. When CKE is LOW, the device will be in either the power-down mode, the clock suspend mode, or the self refresh mode. The CKE is an asynchronous input.
35	CLK	CLK is the master clock input for this device. Except for CKE, all inputs to this device are acquired in synchronization with the rising edge of this pin.
18	$\overline{CS}$	The $\overline{CS}$ input determines whether command input is enabled within the device. Command input is enabled when $\overline{CS}$ is LOW, and disabled with $\overline{CS}$ is HIGH. The device remains in the previous state when $\overline{CS}$ is HIGH.
2, 3, 5, 6, 8, 9, 11, 12, 39, 40, 42, 43, 45, 46, 48, 49	I/O0 to I/O15	I/O0 to I/O15 are I/O pins. I/O through these pins can be controlled in byte units using the LDQM and UDQM pins.
14, 36	LDQM, UDQM	LDQM and UDQM control the lower and upper bytes of the I/O buffers. In read mode, LDQM and UDQM control the output buffer. When LDQM or UDQM is LOW, the corresponding buffer byte is enabled, and when HIGH, disabled. The outputs go to theHIGH impedance state when LDQM/UDQM is HIGH. This function corresponds to $\overline{OE}$ in conventional DRAMs. In write mode, LDQM and UDQM control the input buffer. When LDQM or UDQM is LOW, the corresponding buffer byte is enabled, and data can be written to the device. When LDQM or UDQM is HIGH, input data is masked and cannot be written to the device.
17	$\overline{RAS}$	$\overline{RAS}$, in conjunction with $\overline{CAS}$ and $\overline{WE}$, forms the device command. See the "Command Truth Table" item for details on device commands.
15	$\overline{WE}$	$\overline{WE}$, in conjunction with $\overline{RAS}$ and $\overline{CAS}$, forms the device command. See the "Command Truth Table" item for details on device commands.
7, 13, 38, 44	$V_{CC}Q$	$V_{CC}Q$ is the output buffer power supply.
1, 25	V_{CC}	V_{CC} is the device internal power supply.
4, 10, 41, 47	GNDQ	GNDQ is the output buffer ground.
26, 50	GND	GND is the device internal ground.

IC BLOCK DIAGRAM AND TERMINAL DESCRIPTIONS-17

Q800: AK4588VQ (2/8-Channel Audio CODEC with DIR)-1

BLOCK DIAGRAM



IC BLOCK DIAGRAM AND TERMINAL DESCRIPTIONS-18

Q800: AK4588VQ (2/8-Channel Audio CODEC with DIR)-2

TERMINAL DESCRIPTION

No.	Pin Name	I/O	Function
1	INT1	O	Interrupt 1 Pin
2	BOUT	O	Block-Start Output Pin for Receiver Input "H" during first 40 flames.
3	TVDD	-	Output Buffer Power Supply Pin, 2.7V ~ 5.5V
4	DVDD	-	Digital Power Supply Pin, 3.3V
5	DVSS	-	Digital Ground Pin
6	XTO	O	X'tal Output Pin
7	XTI	I	X'tal Input Pin
8	TEST3	I	Test 3 Pin This pin should be connected to DVSS.
9	MCKO2	O	Master Clock Output 2 Pin
10	MCKO1	O	Master Clock Output 1 Pin
11	COUT	O	C-bit Output Pin for Receiver Input
12	UOUT	O	U-bit Output Pin for Receiver Input
13	VOUT	O	V-bit Output Pin for Receiver Input
14	SDTO2	O	Audio Serial Data Output Pin (DIR/DIT part)
15	BICK2	I/O	Audio Serial Data Clock Pin (DIR/DIT part)
16	LRCK2	I/O	Channel Clock Pin (DIR/DIT part)
17	SDTO1	O	Audio Serial Data Output Pin (ADC/DAC part)
18	BICK1	I/O	Audio Serial Data Clock Pin (ADC/DAC part)
19	LRCK1	I/O	Input Channel Clock Pin
20	CDTO	O	Control Data Output Pin in Serial Mode, I2C= "L".
21	CCLK	I	Control Data Clock Pin in Serial Mode, I2C= "L"
	SCL	I	Control Data Clock Pin in Serial Mode, I2C= "H"
22	CDTI	I	Control Data Input Pin in Serial Mode, I2C= "L".
	SDA	I/O	Control Data Pin in Serial Mode, I2C= "H".
23	CSN	I	Chip Select Pin in Serial Mode, I2C="L".
		I	This pin should be connected to DVSS, I2C="H".
24	DAUX1	I	AUX Audio Serial Data Input Pin (ADC/DAC part)
25	SDTI4	I	DAC4 Audio Serial Data Input Pin
26	SDTI3	I	DAC3 Audio Serial Data Input Pin
27	SDTI2	I	DAC2 Audio Serial Data Input Pin
28	SDTI1	I	DAC1 Audio Serial Data Input Pin
29	XTL1	I	X'tal Frequency Select 0 Pin
30	XTL0	I	X'tal Frequency Select 1 Pin

IC BLOCK DIAGRAM AND TERMINAL DESCRIPTIONS-19

Q800: AK4588VQ (2/8-Channel Audio CODEC with DIR)-3

TERMINAL DESCRIPTION

No.	Pin Name	I/O	Function
31	PDN	I	Power-Down Mode Pin When "L", the AK4588 is powered-down, all output pin goes "L", all registers arereset. When CAD1/0 pins are changed, the AK4588 should be reset by PDN pin.
32	MASTER	I	Master Mode Select Pin "H": Master mode, "L": Slave mode
33	DZF2	O	Zero Input Detect 2 Pin When the input data of the group 1 follow total 8192 LRCK cycles with "0" input data, this pin goes to "H". And when RSTN bit is "0", PWDAN bit is "0", this pin goes to "H". It always is in "L" when P/S is "H".
	OVF	O	Analog Input Overflow Detect Pin This pin goes to"H" if the analog input of Lch or Rch overflows.
34	DZF1	O	Zero Input Detect 1 Pin When the input data of the group 1 follow total 8192 LRCK cycles with "0" input data, this pin goes to "H". And when RSTN bit is "0", PWDAN bit is "0", this pin goes to "H". Output is selected by setting DZFE pin when P/S is "H".
35	LOUT4	O	DAC4 Lch Analog Output Pin
36	NC	-	No Connect No internal bonding.
37	ROUT4	O	DAC4 Rch Analog Output Pin
38	NC	-	No Connect No internal bonding.
39	LOUT3	O	DAC3 Lch Analog Output Pin
40	NC	-	No Connect No internal bonding.
41	ROUT3	O	DAC3 Rch Analog Output Pin
42	NC	-	No Connect No internal bonding.
43	LOUT2	O	DAC2 Lch Analog Output Pin
44	NC	-	No Connect No internal bonding.
45	ROUT2	O	DAC2 Rch Analog Output Pin
46	NC	-	No Connect No internal bonding.
47	LOUT1	O	DAC1 Lch Analog Output Pin
48	NC	-	No Connect No internal bonding.
49	ROUT1	O	DAC1 Rch Analog Output Pin
50	NC	-	No Connect No internal bonding.
51	LIN	I	Lch Analog Input Pin
52	RIN	I	Rch Analog Input Pin
53	VCOM	-	Common Voltage Output Pin 2.2μF capacitor should be connected to PVSS externally.
54	VREFH	-	Positive Voltage Reference Input Pin, AVDD

IC BLOCK DIAGRAM AND TERMINAL DESCRIPTIONS-20

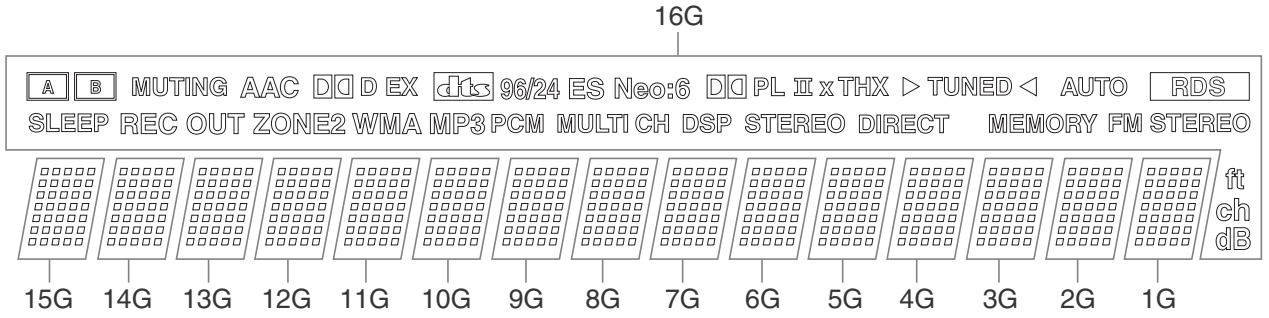
Q800: AK4588VQ (2/8-Channel Audio CODEC with DIR)-4

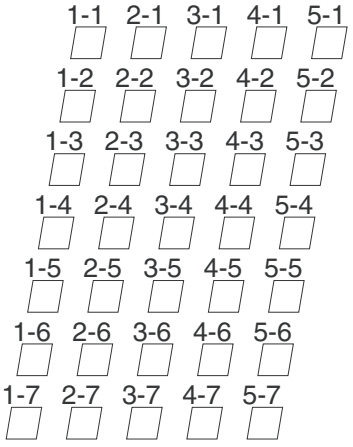
TERMINAL DESCRIPTION

No.	Pin Name	I/O	Function
55	AVDD	-	Analog Power Supply Pin, 4.5V~5.5V
56	AVSS	-	Analog Ground Pin, 0V
57	RX0	I	Receiver Channel 0 Pin (Internal biased pin) This channel is default in serial mode.
58	NC	-	No Connect This pin should be connected to PVSS.
59	RX1	I	Receiver Channel 1 Pin (Internal biased pin)
60	TEST1	I	Test 1 Pin This pin should be connected to PVSS.
61	RX2	I	Receiver Channel 2 Pin (Internal biased pin)
62	NC	-	No Connect This pin should be connected to PVSS.
63	RX3	I	Receiver Channel 3 Pin (Internal biased pin)
64	PVSS	-	PLL Ground pin
65	R	-	External Resistor Pin 12kΩ +/-1% resistor should be connected to PVSS externally.
66	PVDD	-	PLL Power supply pin, 5.0V
67	RX4	I	Receiver Channel 4 Pin (Internal biased pin)
68	TEST2	I	Test 2 Pin This pin should be connected to PVSS.
69	RX5	I	Receiver Channel 5 Pin (Internal biased pin)
70	CAD0	I	Chip Address 0 Pin (ADC/DAC part)
71	RX6	I	Receiver Channel 6 Pin (Internal biased pin)
72	CAD1	I	Chip Address 1 Pin (ADC/DAC part)
73	RX7	I	Receiver Channel 7 Pin (Internal biased pin)
74	I2C	I	Control Mode Select Pin. "L": 4-wire Serial, "H": I^2C Bus
75	DAUX2	I	Auxiliary Audio Data Input Pin (DIR/DIT part)
76	VIN	I	V-bit Input Pin for Transmitter Output
77	MCLK	I	Master Clock Input Pin
78	TX0	O	Transmit Channel (Through Data) Output 0 Pin
79	TX1	O	Transmit Channel Output1 pin When TX bit = "0", Transmit Channel (Through Data) Output 1 Pin. When TX bit = "1", Transmit Channel (DAUX2 Data) Output Pin (Default).
80	INT0	O	Interrupt 0 Pin

FL TUBE VIEW

Q7501: HNA-16SM10T


16G
A B MUTING AAC D D EX 96/24 ES Neo:6 PL II x THX TUNED AUTO RDS
SLEEP REC OUT ZONE2 WMA MP3 PCM MULTI CH DSP STEREO DIRECT MEMORY FM STEREO
ft
ch
dB
15G 14G 13G 12G 11G 10G 9G 8G 7G 6G 5G 4G 3G 2G 1G



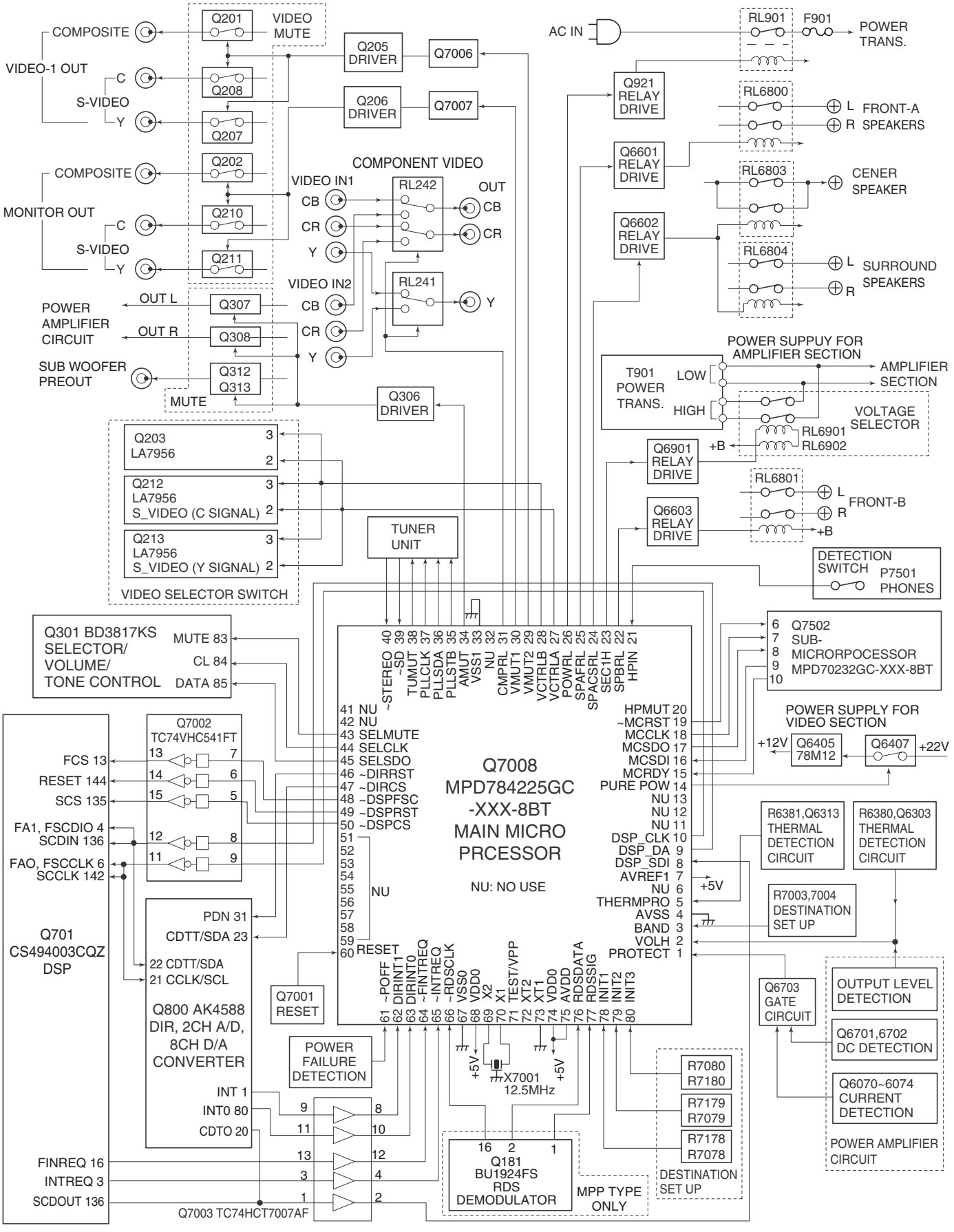
(1G-15G)

	16G	15G-1G
P1	A	1-1
P2	B	2-1
P3	SLEEP	3-1
P4	MUTING	4-1
P5	REC OUT	5-1
P6	ZONE2	1-2
P7	D D	2-2
P8	D	3-2
P9	dts	4-2
P10	ES	5-2
P11	AAC	1-3
P12	MP3	2-3
P13	PCM	3-3
P14	Neo:6	4-3
P15	D PL	5-3
P16	II	1-4
P17	MULTI CH	2-4
P18	DSP	3-4

	16G	15G-1G
P19	STEREO	4-4
P20	DIRECT	5-4
P21	-	1-5
P22	▷ ◁	2-5
P23	TUNED	3-5
P24	MEMORY	4-5
P25	AUTO	5-5
P26	FM STEREO	1-6
P27	RDS	2-6
P28	ft	3-6
P29	ch	4-6
P30	dB	5-6
P31	THX	1-7
P32	EX	2-7
P33	96/24	3-7
P34	x	4-7
P35	WMA	5-7

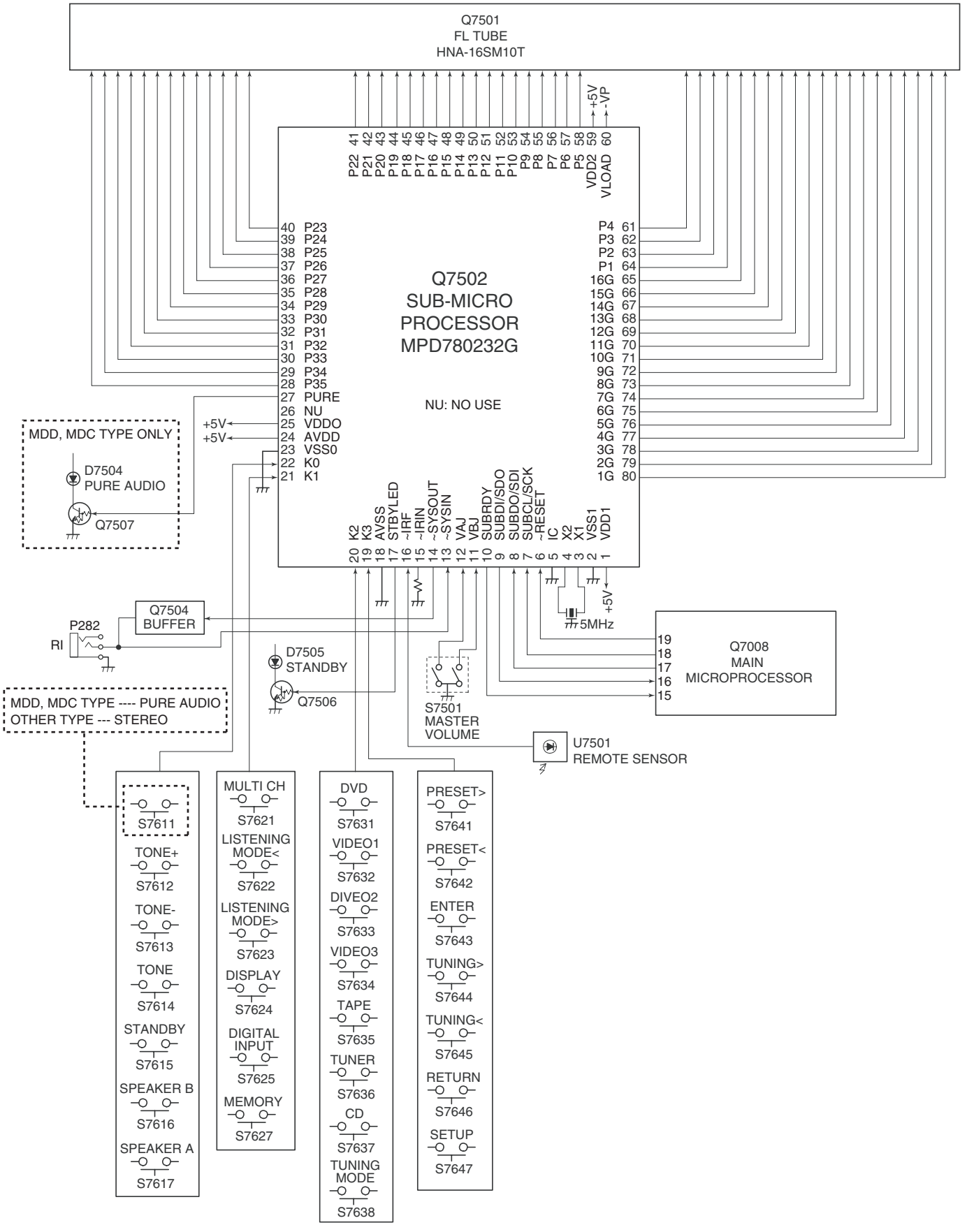
MICROPROCESSOR CONNECTION DIAGRAMS-1

Q7008:MPD784225GC-XXX-8BT(MAIN MICROPROCESSOR)



MICROPROCESSOR CONNECTION DIAGRAMS-2

Q7502:MPD780232GC-XXX-8BT(SUB MICROPROCESSOR)



MICROPROCESSOR TERMINAL DESCRIPTIONS-1

Q7008:MPD784225GC-XXX-8BT(MAIN MICROPROCESSOR)

No.	Pin name	I/O	Description
1	PROTECT	I	Current detection and DC voltage detection input terminal.
2	VOLH	I	Thermal detection and power amplifier output level detection input terminal.
3	BAND	I	Input terminal for destination setup.
4	AVSS	I	Ground terminal.
5	THERMPRO	I	Thermal detection input terminal.
6	NU	O	Not used.
7	AVREF1	I	Ground terminal for A/D converter.
8	DSPSDI	I	Serial data input terminal from DSP and DIR/CODEC.
9	DSPSDO	O	Serial data output terminal to DSP and DIR/CODEC.
10	DSPCLK	O	Serial clock output terminal to DSP and DIR/CODEC.
11	NU	O	Not used.
12	NU	O	Not used.
13	NU	O	Not used.
14	PUREPOW	O	Power supply control terminal of video circuit for Pure audio mode.
15	MCRDY	I	Data ready detection input terminal from the sub microprocessor.
16	MCSDI	I	Data input terminal from the sub microprocessor.
17	MCSDO	O	Data output terminal to the sub microprocessor.
18	MCCLK	O	Serial clock output terminal to the sub microprocessor.
19	~MCRST	O	Reset signal output terminal to the sub microprocessor.
20	HPMUT	O	Muting control output terminal for headphone amplifier. Not used.
21	HPIN	I	Input terminal to detect the connection of headphone.
22	SPBRL	O	Speaker relay control output terminal for front-B.
23	SEC1H	O	Control output terminal for power supply voltage of power amplifier.
24	SPACSRL	O	Speaker relay control output terminal for center and surround channels.
25	SPAFRL	O	Speaker relay control output terminal for front-A channels.
26	POWRL	O	Power source relay control output terminal.
27	VCTRLA	O	Control signal-A output terminal for the video selector switch.
28	VCTRLB	O	Control signal-B output terminal for the video selector switch.
29	~VMUT2	O	Muting control-2 output terminal for the video section.
30	~VMUT1	O	Muting control-1 output terminal for the video section.
31	CMPRL	O	Control output terminal of component video selector.
32	PLLSDI	I	PL serial data input terminal.
33	VSS1	I	Ground terminal.
34	AMUT	O	Audio muting control output terminal.
35	PLLSTB	O	Strobe signal output terminal to PLL IC.
36	PLLSDO	O	Serial data output terminal to PLL IC.
37	PLLCLK	O	Serial clock output terminal to PLL IC.
38	TUMUT	O	Muting control output terminal for the tuner section.

No.	Pin name	I/O	Description
39	~SD	I	Broadcast detection input terminal more than a muting level.
40	~STEREO	I	FM stereo broadcast detection input terminal.
41	NU	---	No used.
42	NU	---	No used.
43	SELMUT	O	Muting control output terminal to selector/ volume/ tone IC BD3817.
44	SELCLK	O	Serial clock output terminal to selector/ volume/ tone IC BD3817.
45	SELSDO	O	Serial data output terminal to selector/ volume/ tone IC BD3817.
46	~DIRRST	O	Reset output terminal for DIR/CODEC.
47	~DIRCS	O	Chip select output terminal for DIR/ CODEC.
48	~DSPFCS	O	Chip select output terminal for DSP IC.
49	~DSPRST	O	Reset output terminal for DSP IC.
50	~DSPCS	O	Chip select output terminal for DSP IC.
51	NU	---	Not used.
52	NU	---	Not used.
53	NU	---	Not used.
54	NU	---	Not used.
55	NU	---	Not used.
56	NU	---	Not used.
57	NU	---	Not used.
58	NU	---	Not used.
59	NU	---	Not used.
60	RESET	I	System reset input terminal.
61	~POFF	O	Power failure detection input terminal.
62	DIRINT1	I	Interrupt input terminal from DIR/ CODEC.
63	DIRINT0	O	Interrupt input terminal from DIR/ CODEC.
64	~FINTREQ	I	Interrupt request input terminal from DSP IC.
65	~INTREQ	I	Interrupt request input terminal from DSP IC.
66	~RDSCLK	I	RDS clock input terminal (European model only)
67	VSS0	I	Ground terminal.
68	VDD0	I	Power supply terminal +5V.
69	X2	O	Connect the ceramic oscillator 12.5MHz.
70	X1	I	Connect the ceramic oscillator 12.5MHz.
71	TEST/VPP	I	Test terminal. Not used.
72	XT2	O	Not used.
73	XT1	I	Not used.
74	VDD0	I	Power supply terminal +5V.
75	AVDD	I	Power supply terminal for A/D converter +5V.
76	RDSDATA	I	Data input terminal of RDS broadcast (European model only)
77	RDSSIG	I	Input terminal to check the signal of RDS broadcast (European model only)
78	INIT1	I	Input terminal-1 for destination setup.
79	INIT2	I	Input terminal-2 for destination setup.
80	INIT3	I	Input terminal-3 for destination setup.

MICROPROCESSOR TERMINAL DESCRIPTIONS-2

Q7502:MPD780232GC-030-8BT(SUB MICROPRCESSOR)

No.	Pin name	I/O	Description
1	VDD1	I	Power supply terminal. Connect to 5V.
2	VSS1	I	Ground terminal.
3	X1	I	X'tal input terminal.
4	X2	O	X'tal input terminal.
5	IC	I	Connect to ground. Not used.
6	~RESET	I	System reset signal input terminal.
7	SUBCL/SCK	I	Clock input terminal to transmit the signal from main microprocessor.
8	SUBDO/SDI	I	Data input terminal to transmit the signal from main microprocessor.
9	SUBDI/SDO	O	Data output terminal to transmit the signal to main microprocessor.
10	SUBRDY	O	Data ready output terminal to transmit to the main microprocessor.
11	VBJ	I	Pulse input terminal from the rotary encoder of volume.
12	VAJ	I	Pulse input terminal from the rotary encoder of volume.
13	~SYSIN	I	System code input terminal.
14	~SYSOUT	O	System code output terminal.
15	~IRIN	I	Not used.
16	~IRF	I	Signal input terminal from the remote controller.
17	STBYLED	O	Standby LED control output terminal.
18	AVSS	I	Ground terminal for A/D converter.
19	K3	I	Operation key connection terminal-3.
20	K2	I	Operation key connection terminal-2.
21	K1	I	Operation key connection terminal-1.
22	K0	I	Operation key connection terminal-0.
23	VSS0	I	Ground terminal.
24	AVDD	I	Power supply terminal for A/D converter.
25	VDDO	I	Power supply terminal. Connect to +5V.
26	NU	---	Not used.
27	PURE	O	PURE AUDIO LED control output terminal.
28	P35	O	Segment output terminal of P35.
29	P34	O	Segment output terminal of P34.
30	P33	O	Segment output terminal of P33.
31	P32	O	Segment output terminal of P32.
32	P31	O	Segment output terminal of P31.
33	P30	O	Segment output terminal of P30.
34	P29	O	Segment output terminal of P29.
35	P28	O	Segment output terminal of P28.
36	P27	O	Segment output terminal of P27.
37	P26	O	Segment output terminal of P26.
38	P25	O	Segment output terminal of P25.
39	P24	O	Segment output terminal of P24.
40	P23	O	Segment output terminal of P23.

No.	Pin name	I/O	Description
41	P22	O	Segment output terminal of P22.
42	P21	O	Segment output terminal of P21.
43	P20	O	Segment output terminal of P20.
44	P19	O	Segment output terminal of P19.
45	P18	O	Segment output terminal of P18.
46	P17	O	Segment output terminal of P17.
47	P16	O	Segment output terminal of P16.
48	P15	O	Segment output terminal of P15.
49	P14	O	Segment output terminal of P14.
50	P13	O	Segment output terminal of P13.
51	P12	O	Segment output terminal of P12.
52	P11	O	Segment output terminal of P11.
53	P10	O	Segment output terminal of P10.
54	P9	O	Segment output terminal of P9.
55	P8	O	Segment output terminal of P8.
56	P7	O	Segment output terminal of P7.
57	P6	O	Segment output terminal of P6.
58	P5	O	Segment output terminal of P5.
59	VDD2	I	Power supply terminal. Connect to +5V.
60	VLOAD	I	Negative power supply terminal of FL controller.
61	P4	O	Segment output terminal of P4.
62	P3	O	Segment output terminal of P3.
63	P2	O	Segment output terminal of P2.
64	P1	O	Segment output terminal of P1.
65	16G	O	Grid output terminal of 16G.
66	15G	O	Grid output terminal of 15G.
67	14G	O	Grid output terminal of 14G.
68	13G	O	Grid output terminal of 13G.
69	12G	O	Grid output terminal of 12G.
70	11G	O	Grid output terminal of 11G.
71	10G	O	Grid output terminal of 10G.
72	9G	O	Grid output terminal of 9G.
73	8G	O	Grid output terminal of 8G.
74	7G	O	Grid output terminal of 7G.
75	6G	O	Grid output terminal of 6G.
76	5G	O	Grid output terminal of 5G.
77	4G	O	Grid output terminal of 4G.
78	3G	O	Grid output terminal of 3G.
79	2G	O	Grid output terminal of 2G.
80	1G	O	Grid output terminal of 1G.

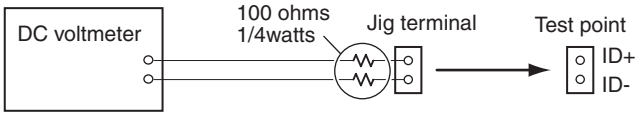
ADJUSTMENT PROCEDURES

IDLING CURRENT ADJUSTMENT

[Note] No load and No signal

Refer to Fig-1 about test points and adjustment points.

1. Before Idling adjustment, turn the trimming resistors R6040, R6041, R6042, R6043, R6044 and R6045to counter clockwise.
2. Connect the DC voltmeter to test point P6080,P6081, P6082, P6083, P6084 and P6085.
   Connect 100-ohm resistance near the terminal of the two poles of a Jig terminal.



3. Connect the AC power supply cord to wall outlet.
4. Press the STANDBY/ON button into the power ON state.
5. Adjust the trimming resistors as following procedure immediately after a power ON.

Channel	Mark	Trimming resistor (Adjustment point)	Test point (Measuring point)	Adjustment value
Left	L	R6040	P6080	2.5 mV
Right	R	R6041	P6081	2.5 mV
Center	C	R6042	P6082	2.5 mV
Surround Left	SL	R6043	P6083	1.5 mV
Surround Right	SR	R6044	P6084	1.5 mV
Surround Back	SB	R6045	P6085	1.5 mV

6. Wait for 4 - 5 minutes. (Heat running)
7. Re-adjust the trimming resistors as following procedure.

Channel	Adjustment point	Measured value		Adjustment value	Specifications (∗ In a stable state)
Left, Right, Center	R6040, R6041, R6042	In case below 7 mV	→	7 mV	10 +/- 3 mV
		In case 7 - 9 mV	→	Leave it as it is	
		In case over 9 mV	→	9 mV	
Surround Left, Surround Right, Surround Back	R6043, R6044, R6045	In case below 4 mV	→	4 mV	7 +/- 3 mV
		In case 4 - 6 mV	→	Leave it as it is	
		In case over 6 mV	→	6 mV	

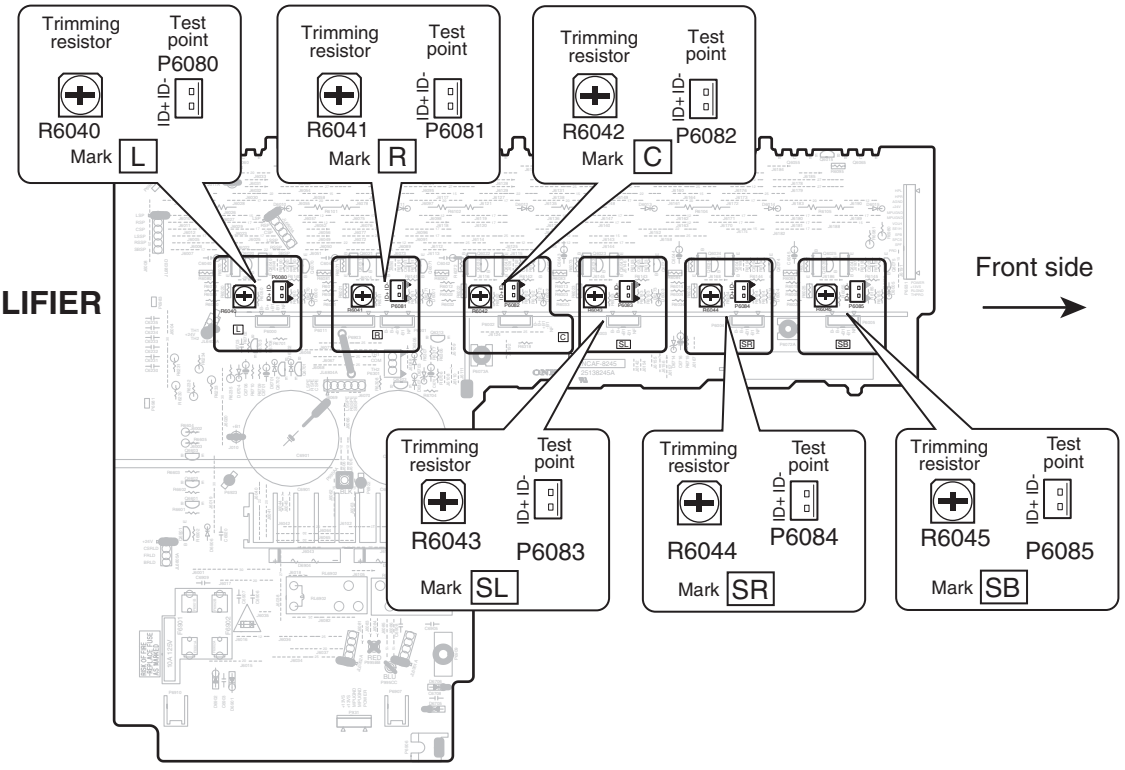
8. Disconnect the DC voltmeter.
9. Press the STANDBY/ON button into the power OFF state.
10. Disconnect the AC power supply cord.

∗ Idling current are stabilized in about 10 minutes after a power supply ON.

Fig-1

U16

POWER AMPLIFIER PC BOARD (NAAF-8245)

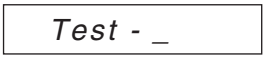


OPERATION CHECK-1

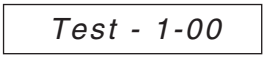
DC VOLTAGE DETECTION PROTECTORS

[NOTE1]
Limit time to apply voltage is 0.5 - 1.0 seconds each channel.
When protection operation does not occur at once, try several times.
[NOTE2]
Don't connect speakers or any load.
Don't short speaker terminals.

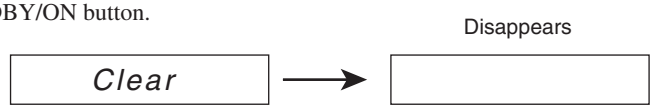
1. Set the unit to test mode *" Test-1-00 "*.
 1-1. Press and the hold down the CD button , then press the STANDBY/ON button when the unit is Power ON.



 1-2. Press the DVD button, while the display of *" Test - _ "* has come out.
 Unit will be in the state of *" Test-1-00 "*.



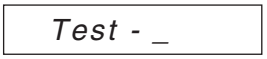
2. Apply DC voltage (+1.5 to +3V) to **MULTI CHANNEL (FL, FR, SL, SR, C, SW)** terminal, each channel.
3. Check that *" Protect "* is display come out.
4. Apply DC voltage (-1.5 to -3V) to **MULTI CHANNEL (FL, FR, SL, SR, C, SW)** terminal, each channel.
5. Check that *" Protect "* is display come out.
6. Press the STANDBY/ON button.



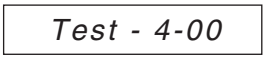
CURRENT DETECTION PROTECTORS

[NOTE]
In the state of test mode"*Test-4-29*", the pulse waveform for checking from speaker terminal outputs automatically.
Therefore, oscillator is unnecessary.

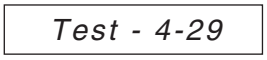
1. Set the unit to test mode *" Test-4-29 "*
 1-1. Press and the hold down the CD button , then press the STANDBY/ON button when the unit is Power ON.



 1-2. Press the VIDEO3 button, while the display of "Test - _" has come out.
 Unit will be in the state of *" Test-4-00 "*.



 1-3. Repeat and press SPEAKERS B until the display of *" Test-4-29 "* comes out.



2. Connect the lord resister (3ohms) to the speaker terminals.
3. Check the not displayed *" PROTECT "* and speaker relays **not turn OFF.**
4. Check the each speaker terminals.
5. Connect the lord resister (1.5ohms) to the speaker terminals.
6. Check the displayed *" PROTECT "* and speaker relays **turn OFF** immediately.
7. Check the each speaker terminals.
8. Press the STANDBY/ON button.

OPERATION CHECK-2

OUTPUT LEVEL & THERMAL DETECTION

Regarding the power supply system of this unit.

<Function>

1. High-voltage mode

Usually, the power supply supplies high voltage to the power amplifier circuit when the relay(RL6901) is turned on.

2. Low-voltage mode

When as follows, a power supply changes to the state of supplying low voltage when the relay (RL6901) in turned off.

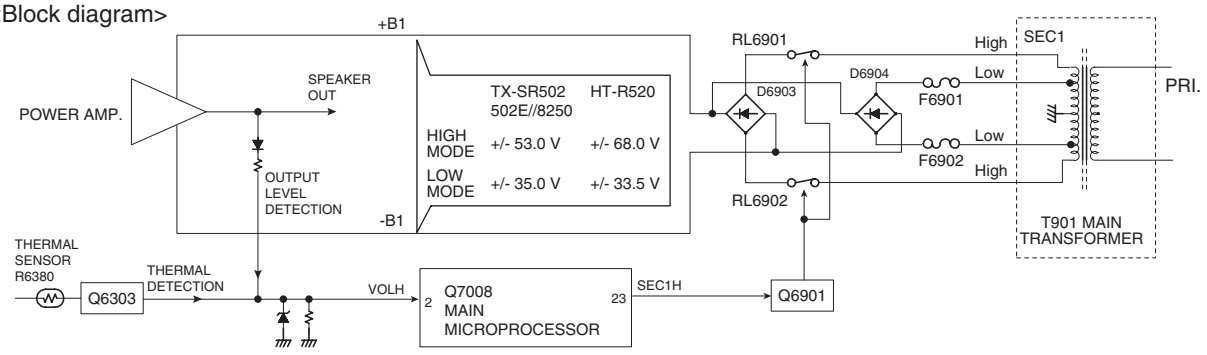
(1) Excessive output signal is continuously outputted from power amplifier.

(2) Temperature of a heat sink over 80 degrees.

<Purpose>

1. The loss which power amplifier generates is decreased. As a result, the miniaturization of a heat sink is realized.
2. Corresponds to a safety standard.

<Block diagram>



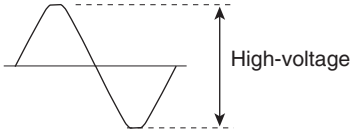
<Necessity for a check of operation>

May not notice the fuse (F6901, F6902) broken in the case of repair.
Because the power supply is continuing supplying voltage from the High side of SEC1 at high-voltage mode.
When a power supply Circuit changes to low voltage mode, amplifier does not operate.
Therefore, it is very important to check operation of this power supply system containing a fuse.

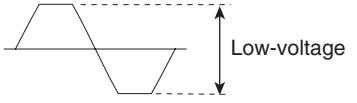
<Procedure>

[NOTE2]
Don't connect speakers or any load.
Don't short speaker terminals.

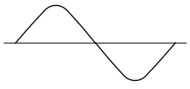
(1) Set the unit is Multi channel input state.
(2) Set the master volume into the minimum.
(3) Apply sine wave signal to MULTI CHANNEL INPUT (FL+FR+C+SL) terminals.
(4) Connect an oscilloscope to speaker terminal of FL channel.
(5) Adjust master volume so that a speaker output may become distortion about 5%.



(6) Check that the RL6901 is turned off after about 5 seconds.
And the power supply changes to low-voltage mode.



(7) Adjust the master volume so that output voltage may become half.



(8) Check that the RL6901 is turned ON after 2 to 3 minutes.
And the power supply returns to high-voltage mode.

OPERATION CHECK-3

OUTPUT LEVEL & THERMAL DETECTION

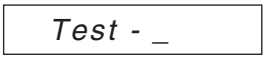
<Check procedure by test mode>

The following is the procedure of checking detection operation of a microprocessor in false, by using test mode.

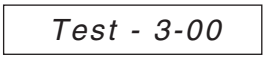
Output level detection

1. Set the unit to test mode *" Test-3-3 "*

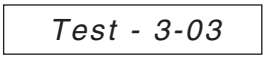
1-1. Press and the hold down the CD button , then press the STANDBY/ON button when the unit is Power ON.



1-2. Press the VIDEO2 button, while the display of " Test - _ " has come out.
Unit will be in the state of *" Test-3-00 ".*



1-3. Repeat and press SPEAKERS B until the display of *" Test-3-3 "* comes out.



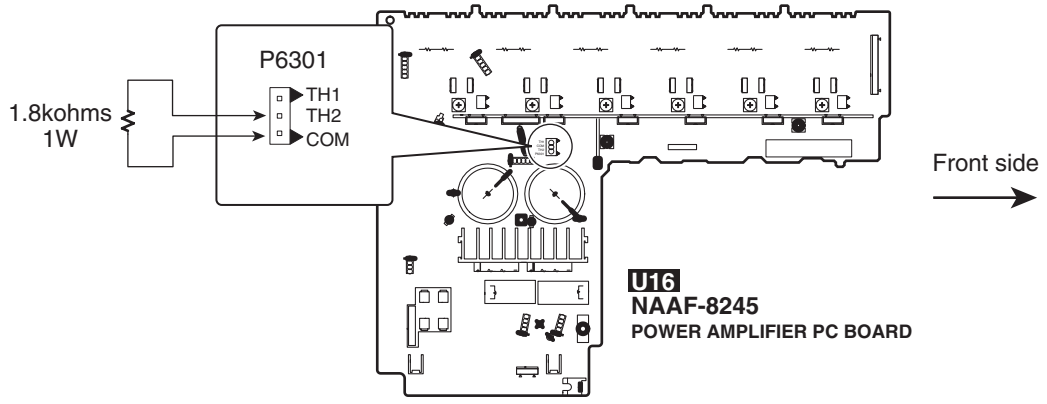
2. Apply signal (sine wave 1kHz, -1.5dBV) to **MULTI CHANNEL (FL, FR, SL, SR, C)** terminal, each channel.
3. Check that FM STEREO indicator is display come out.

6. Press the STANDBY/ON button, and exit from test mode.

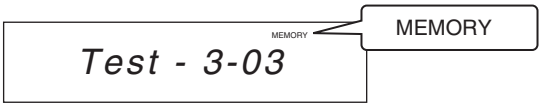
Thermal detection

1. Set the unit to test mode *" Test-3-3 "*
Refer to the clause of " Output level detection ".

2. Connect the resistor 1.8kohms /1W between "HT2" and "COM" terminals of P6301.



3. Check that FM STEREO indicator is display come out.



6. Press the STANDBY/ON button, and exit from test mode.

OPERATION CHECK-4

DSP DEBUG MODE

Regarding the DSP debug mode

TIn this test mode, the check with normal communication of a microcomputer and the data of DSP and DIR is possible.
This information is a help to find the cause of failure.

<How to go in DSP debug mode>

1. Press and hold down the DISPLAY button, then press the STANDBY button when the unit is power ON.

[Example] | *Version 02415A* |

2. Press the DISPLAY button, while the display of *"Version 02415A"* has come out.

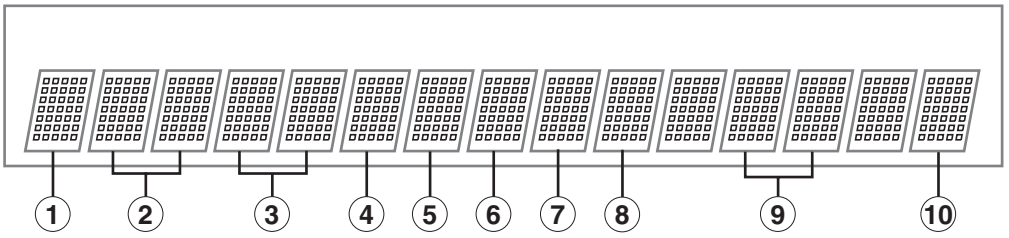
| *DSP Debug Mode* | → | *E2A48K010o 23 o* |

<How to EXIT>

Press STANDBY/ON.

<Explanation of each parameter>

Details



DIR

① UNLOCK
- E = UNLOCK
- = LOCK

② Digital Selecter
- D = DIGITAL
- A = ANALOG
- 1 = COAX
- 2 = OPT1
- 3 = OPT2
- 4 = Others

③ Sampling Frequency
- 96 = 96kHz
- 48 = 48kHz
- 44 = 44kHz
- 32 = 32kHz
- = Not detect

④ Pre Emphasis
- K = OFF
- e = ON

⑤ DIR Status
- 0 = PCM/ANALOG
- 2 = DTS CD
- 5 = DD/DTS/AAC

MEMORY/DOWNLOAD

⑥ AUTOBOOT DSP AB CODE
- 0 = DTS NEO:6
- 1 = DD PCM
- 2 = DTS-ES
- 3 = AAC
- 4 = SIG
- 5 = COS
- 6 = DTS96/24
- 7 = PL2FS

⑦ AUTOBOOT DSP C CODE
- 0 = PL2X (Except DTS96/24)
- 1 = DTS 96/24
- 2 = NEO6
- 3 = T-D

⑧ AUTOBOOT Status
- O = Autoboot is complete
- X = Autoboot is going on

DSP

⑨ DSP Detect Format

[IEC61937]
- 00: Null
- 01: Dolby Digital
- 03: Pause
- 04: MPEG1 L1
- 05: MPEG1 L23/MPEG2 w/o
- 06: MPEG2 w/o
- 07: MPEG2 AAC
- 0B: DTS1
- 0C: DTS2
- 0D: DTS3
- 1B: MPEG2 AAC1
- 1C: MPEG2 AAC2

[Except IEC61937]
- 20: Silent
- 21: DTS LD
- 22: DTS CD
- 23: PCM

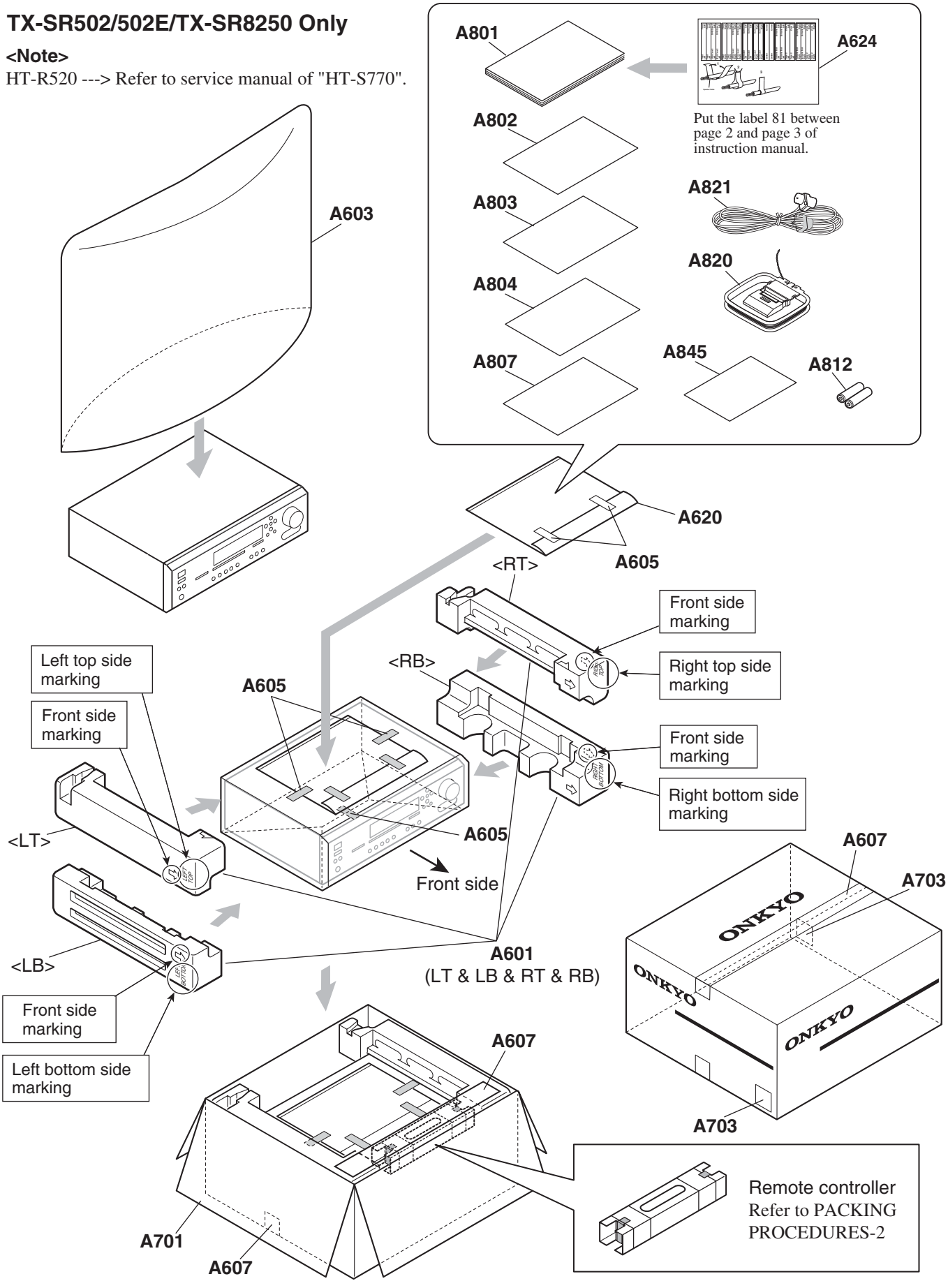
⑩ DSP Decode
- 0 = Decode OK
- X = Decode NG
- - = Analog in

PACKING PROCEDURES-1

TX-SR502/502E/TX-SR8250 Only

<Note>

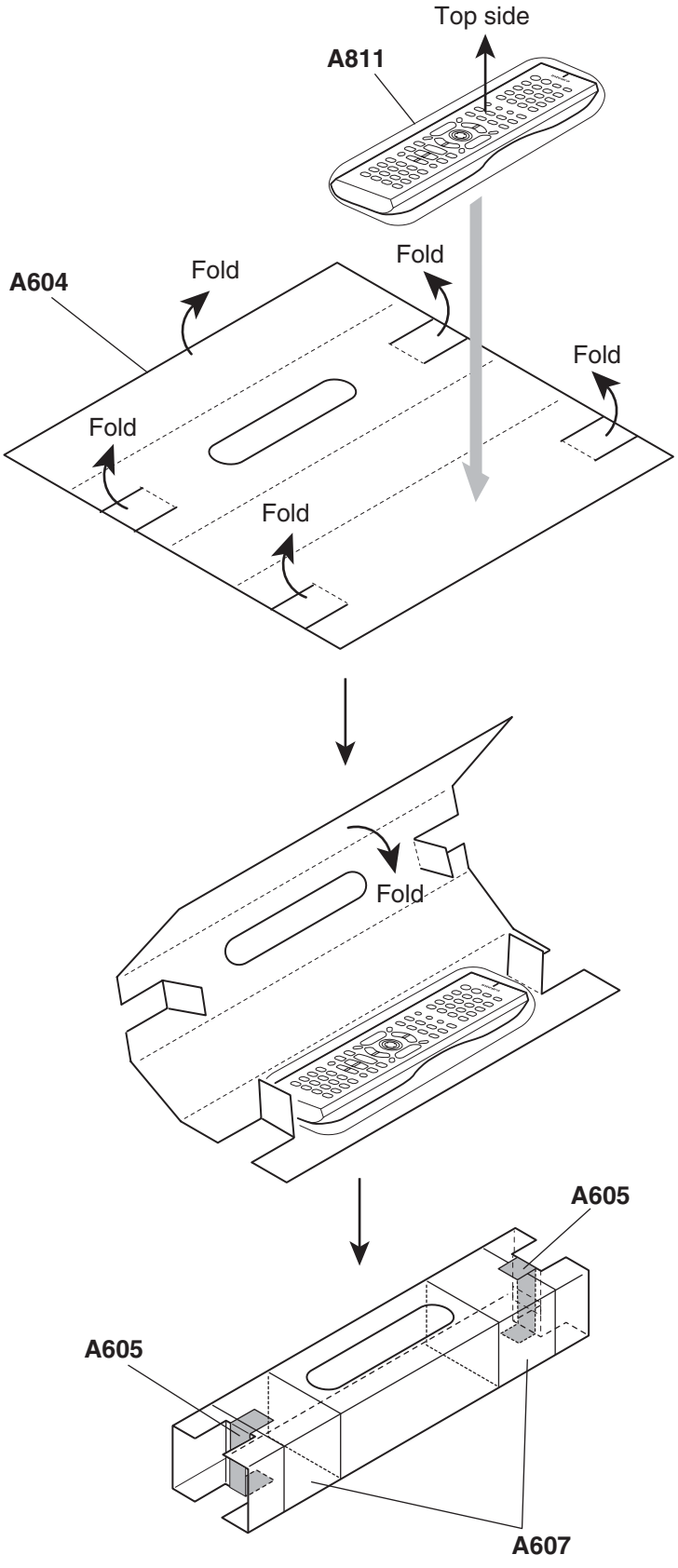
HT-R520 ---> Refer to service manual of "HT-S770".



PACKING PROCEDURES-2

TX-SR502/502E/TX-SR8250 Only

Packing procedure of remote controller



TX-SR502/E/8250/HT-R520

EXPLODED VIEW PARTS LIST

NOTE : THE COMPONENTS IDENTIFIED BY THE MARK ! ARE CRITICAL FOR RISK OF FIRE AND ELECTRIC SHOCK. REPLACE ONLY WITH PART NUMBER SPECIFIED.

<Notes>

(B) : Black model
(S) : Silver model
(G) : Golden model
<**502**>:TX-SR502
<**502E**>:TX-SR502E(European model)
<**8250**>:TX-SR8250(Chinese model)
<**520**>:HT-R520(American model & Canadian model)

<**DC**> : Canadian model
<**DD**> : American model
<**GK**> : Korean model
<**GQ**> : Hong kong model
<**GR**> : Chinese model
<**PA**> : Australian model
<**PP**> : European model
<**PT**> : Asian model (230-240V)
<**WT**> : World wide model

	REF. NO.	NAME	DESCRIPTION	Q'TY	PART NO	REMARKS
EXP	A001	F BRACKET	(B)AS	1	27111360	(B)
EXP	A001	F BRACKET	(S)AS	1	27111361	(S)
EXP	A001	F BRACKET	(G)AS	1	27111362	(G)
EXP	A003	SCREW	3TTB+8B(CU)	32	801612	Except <502 GK>
EXP	A003	SCREW	3TTB+8B(CU)	33	801612	<502 GK>
EXP	A011	CHASSIS	---	1	27100443A	
EXP	A015	HOLDER	KGPS-10RF	1	27190813	
EXP	A017	HOLDER	KGLS-10RT	2	27190428A	
EXP	A025	SCREW	4TTC+8C(BC)	4	830440089	
EXP	A031	BUSHING	S-RELIEF #2271	1	27300750	!
EXP	A033	HEAT SINK	AS.	1	27160546	
EXP	A034	TAPE	TAPE(CLOTH-16U)	(1)	29110083	
EXP	A037	SCREW	3TTB+8B(CU)SR	1	801618	
EXP	A039	SCREW	3SMH10W.SW+15B(CU)	12	801606	
EXP	A040	IB CUSHION	W15x3t TAPE	(1)	28141585	
EXP	A041	CUSHION	---	1	28141613	
EXP	A050	COVER	---	1	28184831	(B)
EXP	A050	COVER	---	1	28184856	(S)
EXP	A050	COVER	---	1	28184857	(G)
EXP	A052	SCREW	3TTB+8B(BC)	6	838430088	(B)
EXP	A052	SCREW	3TTB+8B(UN)	6	838930088	(S),(G)
EXP	A053	LABEL	(COVER)	1	29362772	<520>
EXP	A054	LEG	LEG	4	27175319B	
EXP	A056	CUSHION	---	8	28141494	
EXP	A060	KNOB	(VOL)AS	1	28325643	<8250> (G)
EXP	A060	KNOB	(VOL)AS	1	28326197	(B)
EXP	A060	KNOB	(VOL)AS	1	28326198	(S)
EXP	A060	KNOB	(VOL)AS	1	28326199	<502> (G)
EXP	A062	CLEAR PLT	---	1	28192025B	(B)
EXP	A062	CLEAR PLT	---	1	28192027B	(S),(G)
EXP	A081	SCREW	3P+10FN(BC)	2	82143010	Except <DD, DC>
EXP	A082	KNOB	(POW)	1	28325497A	<502 PA,WT>,<502E> (B)
EXP	A082	KNOB	(POW)	1	28325499A	<502>,<8250> (G)
EXP	A082	KNOB	(POW)	1	28325547A	<502 GR,PA,WT>,<502E> (S)

EXP	A401	REAR PANEL	---	1	27123242A	<502 DD,DC>
EXP	A401	REAR PANEL	---	1	27123243	<502E>
EXP	A401	REAR PANEL	---	1	27123244	<502 GK>
EXP	A401	REAR PANEL	---	1	27123245	<502 WT>
EXP	A401	REAR PANEL	---	1	27123246	<502 GR>
EXP	A401	REAR PANEL	---	1	27123247	<502 PA>
EXP	A401	REAR PANEL	---	1	27123249A	<520>
EXP	A401	REAR PANEL	---	1	27123250	<8250>
EXP	A401	REAR PANEL	---	1	27123251	<502 GQ>
EXP	A401	REAR PANEL	---	1	27123290	<502 PT>
EXP	A402	SCREW	3TTB+8B(BC)	28	838430088	<502E>
EXP	A402	SCREW	3TTB+8B(BC)	29	838430088	<502 GK,GR>
EXP	A402	SCREW	3TTB+8B(BC)	31	838430088	<502 DC,DD,PA,PT>,<502E>
EXP	A402	SCREW	3TTB+8B(BC)	32	838430088	<502 GQ,WT>,<8250
EXP	A403	HOLDER	(OUTLET)	1	27191143	<502 GR>,<8250>
EXP	A407	F PANEL	---	1	27212630	<502 DD,DC>(B)
EXP	A407	F PANEL	---	1	27212631	<502 DC>(S)
EXP	A407	F PANEL	---	1	27212632	<502E>(B)
EXP	A407	F PANEL	---	1	27212633	<502E>(S)
EXP	A407	F PANEL	---	1	27212634	<502 GR,PA,WT>(S)
EXP	A407	F PANEL	---	1	27212635	<502 PA,WT>(B)
EXP	A407	F PANEL	---	1	27212636	<502>(G)
EXP	A407	F PANEL	---	1	27212638	<520>(B)
EXP	A407	F PANEL	---	1	27212639	<520>(S)
EXP	A407	F PANEL	---	1	27212640	<8250>
EXP	A409	BADGE	BADGE	1	28135244	(B)
EXP	A409	BADGE	BADGE	1	28135245	(S),(G)
EXP	A413	LABEL	(PT)	1	29363379-1	<502>,<502E>,<8250>
EXP	A420	FACET	---	1	28198987	<502 PA,PT,GR,GQ,WT>
EXP	A420	FACET	---	1	28198987	<502E>,<8250>
EXP	A430	LABEL	HOOKUP-ONKYO	1	29363194	<502 DD>,<520>
EXP	F901	FUSE	6.3A-UL/T-237	1	252166	! <502 DD,DC,WT>
EXP	F901 or	FUSE	6.3A-T/UL-ST2	(1)	252260	! <502 DD,DC,WT>
EXP	F901	FUSE	8A-UL	1	252198	!<520>
EXP	F901 or	FUSE	8A-T/UL-ST2	(1)	252261	!<520>
EXP	F902	FUSE	3.15A-SE-EAK	1	252076	! <502 PA,PT,WT,GR,GK,GQ>
EXP	F902 or	FUSE	3.15A-SE-TL250V	(1)	252242	! <502 PA,PT,WT,GR,GK,GQ>
EXP	F902 or	FUSE	3.15A-SE-TL250V	(1)	252276	! <502 PA,PT,WT,GR,GK,GQ>
EXP	F902	FUSE	3.15A-SE-EAK	1	252076	! <502E>,<8250>
EXP	F902 or	FUSE	3.15A-SE-TL250V	(1)	252242	! <502E>,<8250>
EXP	F902 or	FUSE	3.15A-SE-TL250V	(1)	252276	! <502E>,<8250>
EXP	F903	FUSE	2.5A-SE-EAK	1	252075	! <502 PA,PT,WT,GR,GK,GQ>
EXP	F903 or	FUSE	2.5A-SE-TL250V	(1)	252241	! <502 PA,PT,WT,GR,GK,GQ>
EXP	F903 or	FUSE	2.5A-SE-TL250V	(1)	252275	! <502 PA,PT,WT,GR,GK,GQ>
EXP	F903	FUSE	2.5A-SE-EAK	1	252075	! <520E>,<8250>
EXP	F903 or	FUSE	2.5A-SE-TL250V	(1)	252241	! <520E>,<8250>
EXP	F903 or	FUSE	2.5A-SE-TL250V	(1)	252275	! <520E>,<8250>
EXP	F903	FUSE	5A-UL/T-237	1	252164	! <502 DD, DC>,<520>
EXP	F903 or	FUSE	5A-T/UL-ST2	(1)	252258	! <502 DD, DC>,<520>
EXP	F6901	FUSE	10A-UL	1	252199	! <502 DD, DC>,<520>
EXP	F6901	FUSE	10A-EAK	1	252100	! <502 PA,WT,GR,PT,GK,GQ>
EXP	F6901 or	FUSE	10A-TL250V	(1)	252307	! <502 PA,WT,GR,PT,GK,GQ>
EXP	F6901	FUSE	10A-EAK	1	252100	! <502E>
EXP	F6901 or	FUSE	10A-TL250V	(1)	252307	! <502E>
EXP	F6902	FUSE	10A-UL	1	252199	! <502 DD, DC>,<520>
EXP	F6902	FUSE	10A-EAK	1	252100	! <502 PA,WT,GR,PT,GK,GQ>
EXP	F6902 or	FUSE	10A-TL250V	(1)	252307	! <502 PA,WT,GR,PT,GK,GQ>
EXP	F6902	FUSE	10A-EAK	1	252100	! <502E>
EXP	F6902 or	FUSE	10A-TL250V	(1)	252307	! <502E>
EXP	P101	FFC	NCFC7-151512	1	2047151512	
EXP	P306B	TAPE	TAPE(CLOTH-16U)	(1)	29110083	
EXP	P7502	FFC	NCFC5-102012	1	2045102012	
EXP	P7503	FFC	NCFC7-081012	1	2047081012	
EXP	P800	WIRE TIE	BINDER UL	10	260208	
EXP	P901	AC CORD	AS-BS	1	253198HIT	! <502 GQ>
EXP	P901	AC CORD	AS-CCC	1	253377LTK	! <502 GR>,<8250>
EXP	P901 or	AC CORD	AS-CCC	(1)	253355VOL	! <502 GR>,<8250>
EXP	P901	AC CORD	AS-CEE-2	1	253233KAW	! <502 WT,PT,GK>,<502E>
EXP	P901 or	AC CORD	AS-CEE-2	(1)	253306VOL	! <502 WT,PT,GK>,<502E>
EXP	P901 or	AC CORD	AS-CEE-2	(1)	253374LTK	! <502 WT,PT,GK>,<502E>
EXP	P901	AC CORD	AS-SAA	1	253197HIT	! <502 PA>
EXP	P901	AC CORD	AS-UC-2	1	253368LTK	! <502 DC,DD>,<520>
EXP	P901 or	AC CORD	AS-UC-2	(1)	253332HIT	! <502 DC,DD>,<520>

EXP	P901 or	AC CORD	AS-UC-2	(1)	253333VOL	! <502 DC,DD>,<520>
EXP	P901 or	AC CORD	AS-UC-2	(1)	253368LTK	<520>
EXP	P902A	AC OUTLET	NSCT-2P2561	1	25052665	<502 GK>
EXP	Q6050	TR	2SC5198-O	1	2203063	<502>,<502E>,<8250>
EXP	Q6050 or	TR	2SC5198-R	(1)	2203062	<502>,<502E>,<8250>
EXP	Q6050 or	TR	MN130S-O	(1)	2203663	<502>,<502E>,<8250>
EXP	Q6050 or	TR	MN130S-P	(1)	2203666	<502>,<502E>,<8250>
EXP	Q6050 or	TR	MN130S-Y	(1)	2203664	<502>,<502E>,<8250>
EXP	Q6050	TR	2SC5242-O	1	2202843	<520>
EXP	Q6050 or	TR	2SC5242-R	(1)	2202842	<520>
EXP	Q6050 or	TR	MN150S-O	(1)	2203683	<520>
EXP	Q6050 or	TR	MN150S-P	(1)	2203686	<520>
EXP	Q6050 or	TR	MN150S-Y	(1)	2203684	<520>
EXP	Q6050A	ISO SHEET	AC238	12	223024	
EXP	Q6051	TR	2SC5198-O	1	2203063	<502>,<502E>,<8250>
EXP	Q6051 or	TR	2SC5198-R	(1)	2203062	<502>,<502E>,<8250>
EXP	Q6051 or	TR	MN130S-O	(1)	2203663	<502>,<502E>,<8250>
EXP	Q6051 or	TR	MN130S-Y	(1)	2203664	<502>,<502E>,<8250>
EXP	Q6051 or	TR	MN130S-P	(1)	2203666	<502>,<502E>,<8250>
EXP	Q6051	TR	2SC5242-O	1	2202843	<520>
EXP	Q6051 or	TR	2SC5242-R	(1)	2202842	<520>
EXP	Q6051 or	TR	MN150S-O	(1)	2203683	<520>
EXP	Q6051 or	TR	MN150S-Y	(1)	2203684	<520>
EXP	Q6051 or	TR	MN150S-P	(1)	2203686	<520>
EXP	Q6052	TR	2SC5198-R	1	2203062	<502>,<502E>,<8250>
EXP	Q6052 or	TR	2SC5198-O	(1)	2203063	<502>,<502E>,<8250>
EXP	Q6052 or	TR	MN130S-O	(1)	2203663	<502>,<502E>,<8250>
EXP	Q6052 or	TR	MN130S-Y	(1)	2203664	<502>,<502E>,<8250>
EXP	Q6052 or	TR	MN130S-P	(1)	2203666	<502>,<502E>,<8250>
EXP	Q6052	TR	2SC5242-O	1	2202843	<520>
EXP	Q6052 or	TR	2SC5242-R	(1)	2202842	<520>
EXP	Q6052 or	TR	MN150S-O	(1)	2203683	<520>
EXP	Q6052 or	TR	MN150S-Y	(1)	2203684	<520>
EXP	Q6052 or	TR	MN150S-P	(1)	2203686	<520>
EXP	Q6053	TR	2SC5198-R	1	2203062	<502>,<502E>,<8250>
EXP	Q6053 or	TR	2SC5198-O	(1)	2203063	<502>,<502E>,<8250>
EXP	Q6053 or	TR	MN130S-Y	(1)	2203664	<502>,<502E>,<8250>
EXP	Q6053 or	TR	MN130S-P	(1)	2203666	<502>,<502E>,<8250>
EXP	Q6053	TR	2SC5242-O	1	2202843	<520>
EXP	Q6053 or	TR	2SC5242-R	(1)	2202842	<520>
EXP	Q6053 or	TR	MN150S-O	(1)	2203683	<520>
EXP	Q6053 or	TR	MN150S-Y	(1)	2203684	<520>
EXP	Q6053 or	TR	MN150S-P	(1)	2203686	<520>
EXP	Q6054	TR	2SC5198-R	1	2203062	<502>,<502E>,<8250>
EXP	Q6054 or	TR	2SC5198-O	(1)	2203063	<502>,<502E>,<8250>
EXP	Q6054 or	TR	MN130S-O	(1)	2203663	<502>,<502E>,<8250>
EXP	Q6054 or	TR	MN130S-Y	(1)	2203664	<502>,<502E>,<8250>
EXP	Q6054 or	TR	MN130S-P	(1)	2203666	<502>,<502E>,<8250>
EXP	Q6054	TR	2SC5242-O	1	2202843	<520>
EXP	Q6054 or	TR	2SC5242-R	(1)	2202842	<520>
EXP	Q6054 or	TR	MN150S-O	(1)	2203683	<520>
EXP	Q6054 or	TR	MN150S-Y	(1)	2203684	<520>
EXP	Q6054 or	TR	MN150S-P	(1)	2203686	<520>
EXP	Q60551	TR	2SC5198-R	1	2203062	<502>,<502E>,<8250>
EXP	Q6055 or	TR	2SC5198-O	(1)	2203063	<502>,<502E>,<8250>
EXP	Q6055 or	TR	MN130S-O	(1)	2203663	<502>,<502E>,<8250>
EXP	Q6055 or	TR	MN130S-Y	(1)	2203664	<502>,<502E>,<8250>
EXP	Q6055 or	TR	MN130S-P	(1)	2203666	<502>,<502E>,<8250>
EXP	Q60551	TR	2SC5242-O	1	2202843	<520>
EXP	Q6055 or	TR	2SC5242-R	(1)	2202842	<520>
EXP	Q6055 or	TR	MN150S-O	(1)	2203683	<520>
EXP	Q6055 or	TR	MN150S-Y	(1)	2203684	<520>
EXP	Q6055 or	TR	MN150S-P	(1)	2203686	<520>
EXP	Q6060	TR	2SA1941-O	1	2203053	<502>,<502E>,<8250>
EXP	Q6060 or	TR	2SA1941-R	(1)	2203052	<502>,<502E>,<8250>
EXP	Q6060 or	TR	MP130S-O	(1)	2203673	<502>,<502E>,<8250>
EXP	Q6060 or	TR	MP130S-Y	(1)	2203674	<502>,<502E>,<8250>
EXP	Q6060 or	TR	MP130S-P	(1)	2203676	<502>,<502E>,<8250>
EXP	Q6060	TR	2SA1962-O	1	2202833	<520>
EXP	Q6060 or	TR	2SA1962-R	(1)	2202832	<520>
EXP	Q6060 or	TR	MP150S-O	(1)	2203693	<520>
EXP	Q6060 or	TR	MP150S-Y	(1)	2203694	<520>
EXP	Q6060 or	TR	MP150S-P	(1)	2203696	<520>

EXP	Q6061	TR	2SA1941-O	1	2203053	<502>,<502E>,<8250>
EXP	Q6061 or	TR	2SA1941-R	(1)	2203052	<502>,<502E>,<8250>
EXP	Q6061 or	TR	MP130S-O	(1)	2203673	<502>,<502E>,<8250>
EXP	Q6061 or	TR	MP130S-Y	(1)	2203674	<502>,<502E>,<8250>
EXP	Q6061 or	TR	MP130S-P	(1)	2203676	<502>,<502E>,<8250>
EXP	Q6061	TR	2SA1962-O	1	2202833	<520>
EXP	Q6061 or	TR	2SA1962-R	(1)	2202832	<520>
EXP	Q6061 or	TR	MP150S-O	(1)	2203693	<520>
EXP	Q6061 or	TR	MP150S-Y	(1)	2203694	<520>
EXP	Q6061 or	TR	MP150S-P	(1)	2203696	<520>
EXP	Q6062	TR	2SA1941-R	1	2203052	<502>,<502E>,<8250>
EXP	Q6062 or	TR	2SA1941-O	(1)	2203053	<502>,<502E>,<8250>
EXP	Q6062 or	TR	MP130S-O	(1)	2203673	<502>,<502E>,<8250>
EXP	Q6062 or	TR	MP130S-Y	(1)	2203674	<502>,<502E>,<8250>
EXP	Q6062 or	TR	MP130S-P	(1)	2203676	<502>,<502E>,<8250>
EXP	Q6062	TR	2SA1962-R	1	2202832	<520>
EXP	Q6062 or	TR	2SA1962-O	(1)	2202833	<520>
EXP	Q6062 or	TR	MP150S-O	(1)	2203693	<520>
EXP	Q6062 or	TR	MP150S-Y	(1)	2203694	<520>
EXP	Q6062 or	TR	MP150S-P	(1)	2203696	<520>
EXP	Q6063	TR	2SA1941-R	1	2203052	<502>,<502E>,<8250>
EXP	Q6063 or	TR	2SA1941-O	(1)	2203053	<502>,<502E>,<8250>
EXP	Q6063 or	TR	MP130S-O	(1)	2203673	<502>,<502E>,<8250>
EXP	Q6063 or	TR	MP130S-Y	(1)	2203674	<502>,<502E>,<8250>
EXP	Q6063 or	TR	MP130S-P	(1)	2203676	<502>,<502E>,<8250>
EXP	Q6063 or	TR	2SA1962-R	(1)	2202832	<520>
EXP	Q6063 or	TR	2SA1962-O	(1)	2202833	<520>
EXP	Q6063	TR	MP150S-O	1	2203693	<520>
EXP	Q6063 or	TR	MP150S-Y	(1)	2203694	<520>
EXP	Q6063 or	TR	MP150S-P	(1)	2203696	<520>
EXP	Q6064	TR	2SA1941-R	1	2203052	<502>,<502E>,<8250>
EXP	Q6064 or	TR	2SA1941-O	(1)	2203053	<502>,<502E>,<8250>
EXP	Q6064 or	TR	MP130S-O	(1)	2203673	<502>,<502E>,<8250>
EXP	Q6064 or	TR	MP130S-Y	(1)	2203674	<502>,<502E>,<8250>
EXP	Q6064 or	TR	MP130S-P	(1)	2203676	<502>,<502E>,<8250>
EXP	Q6064	TR	2SA1962-R	1	2202832	<520>
EXP	Q6064 or	TR	2SA1962-O	(1)	2202833	<520>
EXP	Q6064 or	TR	MP150S-O	(1)	2203693	<520>
EXP	Q6064 or	TR	MP150S-Y	(1)	2203694	<520>
EXP	Q6064 or	TR	MP150S-P	(1)	2203696	<520>
EXP	Q6065	TR	2SA1941-R	1	2203052	<502>,<502E>,<8250>
EXP	Q6065 or	TR	2SA1941-O	(1)	2203053	<502>,<502E>,<8250>
EXP	Q6065 or	TR	MP130S-O	(1)	2203673	<502>,<502E>,<8250>
EXP	Q6065 or	TR	MP130S-Y	(1)	2203674	<502>,<502E>,<8250>
EXP	Q6065 or	TR	MP130S-P	(1)	2203676	<502>,<502E>,<8250>
EXP	Q6065	TR	2SA1962-R	1	2202832	<520>
EXP	Q6065 or	TR	2SA1962-O	(1)	2202833	<520>
EXP	Q6065 or	TR	MP150S-O	(1)	2203693	<520>
EXP	Q6065 or	TR	MP150S-Y	(1)	2203694	<520>
EXP	Q6065 or	TR	MP150S-P	(1)	2203696	<520>
EXP	T901	P TRANS	NPT-1493D	1	2301740	! <502 DD,DC>
EXP	T901	P TRANS	NPT-1493P	1	2301741	! <502 PA,PT>,<502E>
EXP	T901	P TRANS	NPT-1493DG	1	2301742	! <502 GK,GQ,GR,WT>
EXP	T901	P TRANS	NPT-1493DG	1	2301742	! <8250>
EXP	T901	P TRANS	NPT-1494D	1	2301744	! <520>
EXP	U1	PREAMPLIFIER PC board AS	NADG-8230-1A	1	1B016530-1A	<502 DD,DC>
EXP	U1	PREAMPLIFIER PC board AS	NADG-8230-1B	1	1B016530-1B	<502E>
EXP	U1	PREAMPLIFIER PC board AS	NADG-8230-1C	1	1B016530-1C	<502 PA,GK,GQ,GR,PT>
EXP	U1	PREAMPLIFIER PC board AS	NADG-8230-1C	1	1B016530-1C	<8250>
EXP	U1	PREAMPLIFIER PC board AS	NADG-8230-1D	1	1B016530-1D	<502 WT>
EXP	U1	PREAMPLIFIER PC board AS	NADG-8230-1F	1	1B016530-1F	<520>
EXP	U2	DISPLAY PC board AS	NADIS-8231-1A	1	1B016531-1A	<502 DD,DC>
EXP	U2	DISPLAY PC board AS	NADIS-8231-1B	1	1B016531-1B	<502E>
EXP	U2	DISPLAY PC board AS	NADIS-8231-1C	1	1B016531-1C	<502 PA,GK,GQ,GR,PT>
EXP	U2	DISPLAY PC board AS	NADIS-8231-1C	1	1B016531-1C	<8250>
EXP	U2	DISPLAY PC board AS	NADIS-8231-1D	1	1B016531-1D	<502 WT>
EXP	U2	DISPLAY PC board AS	NADIS-8231-1F	1	1B016531-1F	<520>
EXP	U3	OPERATION SWITCH PC board AS	NASW-8232-1A	1	1B016532-1A	<502 DD,DC>
EXP	U3	OPERATION SWITCH PC board AS	NASW-8232-1B	1	1B016532-1B	<502E>
EXP	U3	OPERATION SWITCH PC board AS	NASW-8232-1C	1	1B016532-1C	<502 PA,GK,GQ,GR,PT>
EXP	U3	OPERATION SWITCH PC board AS	NASW-8232-1C	1	1B016532-1C	<8250>
EXP	U3	OPERATION SWITCH PC board AS	NASW-8232-1D	1	1B016532-1D	<502 WT>
EXP	U3	OPERATION SWITCH PC board AS	NASW-8232-1F	1	1B016532-1F	<520>

EXP	U4	HEADPHONE TERMINAL PC board AS	NAETC-8233-1A	1	1B016533-1A	<502 DD, DC>
EXP	U4	HEADPHONE TERMINAL PC board AS	NAETC-8233-1B	1	1B016533-1B	<502E>
EXP	U4	HEADPHONE TERMINAL PC board AS	NAETC-8233-1C	1	1B016533-1C	<502 PA,GK,GQ,GR,PT>
EXP	U4	HEADPHONE TERMINAL PC board AS	NAETC-8233-1C	1	1B016533-1C	<8250>
EXP	U4	HEADPHONE TERMINAL PC board AS	NAETC-8233-1D	1	1B016533-1D	<502 WT>
EXP	U4	HEADPHONE TERMINAL PC board AS	NAETC-8233-1F	1	1B016533-1F	<520>
EXP	U5	VIDEO3 TERMINAL PC board AS	NAETC-8234-1A	1	1B016534-1A	<502 DD, DC>
EXP	U5	VIDEO3 TERMINAL PC board AS	NAETC-8234-1B	1	1B016534-1B	<502E>
EXP	U5	VIDEO3 TERMINAL PC board AS	NAETC-8234-1C	1	1B016534-1C	<502 PA,GK,GQ,GR,PT>
EXP	U5	VIDEO3 TERMINAL PC board AS	NAETC-8234-1C	1	1B016534-1C	<8250>
EXP	U5	VIDEO3 TERMINAL PC board AS	NAETC-8234-1D	1	1B016534-1D	<502 WT>
EXP	U5	VIDEO3 TERMINAL PC board AS	NAETC-8234-1F	1	1B016534-1F	<520>
EXP	U6	DRIVER AMPLIFIER PC board AS	NAAF-8235-1A	1	1B016535-1A	<502 DD, DC>
EXP	U6	DRIVER AMPLIFIER PC board AS	NAAF-8235-1B	1	1B016535-1B	<502 PA,GK,GQ,GR,PT,WT>
EXP	U6	DRIVER AMPLIFIER PC board AS	NAAF-8235-1B	1	1B016535-1B	<502E>,<8250>
EXP	U6	DRIVER AMPLIFIER PC board AS	NAAF-8235-1D	1	1B016535-1D	<520>
EXP	U7	COMPONENT VIDEO PC board AS	NAVD-8236-1A	1	1B016536-1A	<502 DD, DC>
EXP	U7	COMPONENT VIDEO PC board AS	NAVD-8236-1B	1	1B016536-1B	<502 PA,GK,GQ,GR,PT,WT>
EXP	U7	COMPONENT VIDEO PC board AS	NAVD-8236-1B	1	1B016536-1B	<502E>,<8250>
EXP	U7	COMPONENT VIDEO PC board AS	NAVD-8236-1D	1	1B016536-1D	<520>
EXP	U9	REGULATOR PC board AS	NAETC-8238-1A	1	1B016538-1A	<502 DD, DC>
EXP	U9	REGULATOR PC board AS	NAETC-8238-1B	1	1B016538-1B	<502 PA,GK,GQ,GR,PT,WT>
EXP	U9	REGULATOR PC board AS	NAETC-8238-1B	1	1B016538-1B	<502E>,<8250>
EXP	U9	REGULATOR PC board AS	NAETC-8238-1D	1	1B016538-1D	<520>
EXP	U10	TERMINAL PC board AS	NAETC-8239-1A	1	1B016539-1A	<502 DD, DC>
EXP	U10	TERMINAL PC board AS	NAETC-8239-1B	1	1B016539-1B	<502 PA,GK,GQ,GR,PT,WT>
EXP	U10	TERMINAL PC board AS	NAETC-8239-1B	1	1B016539-1B	<502E>,<8250>
EXP	U10	TERMINAL PC board AS	NAETC-8239-1D	1	1B016539-1D	<520>
EXP	U11	SPEAKER TERMINAL PC board AS	NAETC-8240-1D	1	1B016540-1D	<520>
EXP	U12	HOLDER PC board AS	NAETC-8241-1A	1	1B016541-1A	<502 DD, DC>
EXP	U12	HOLDER PC board AS	NAETC-8241-1B	1	1B016541-1B	<502 PA,GK,GQ,GR,PT,WT>
EXP	U12	HOLDER PC board AS	NAETC-8241-1B	1	1B016541-1B	<502E>,<8250>
EXP	U12	HOLDER PC board AS	NAETC-8241-1D	1	1B016541-1D	<520>
EXP	U14	TERMINAL PC board AS	NAETC-8243-1A	1	1B016543-1A	<502 DD, DC>
EXP	U14	TERMINAL PC board AS	NAETC-8243-1B	1	1B016543-1B	<502 PA,GK,GQ,GR,PT,WT>
EXP	U14	TERMINAL PC board AS	NAETC-8243-1B	1	1B016543-1B	<502E>,<8250>
EXP	U14	TERMINAL PC board AS	NAETC-8243-1D	1	1B016543-1D	<520>
EXP	U15	SPEAKER TERMINAL PC board AS	NAETC-8244-1A	1	1B016544-1A	<502 DD, DC>
EXP	U15	SPEAKER TERMINAL PC board AS	NAETC-8244-1B	1	1B016544-1B	<502 PA,WT,GK,GQ,GR,PT>
EXP	U15	SPEAKER TERMINAL PC board AS	NAETC-8244-1B	1	1B016544-1B	,<502E> <8250>
EXP	U16	POWER AMPLIFIER PC board AS	NAAF-8245-1A	1	1B016545-1A	<502 DD, DC>
EXP	U16	POWER AMPLIFIER PC board AS	NAAF-8245-1B	1	1B016545-1B	<502E>
EXP	U16	POWER AMPLIFIER PC board AS	NAAF-8245-1C	1	1B016545-1C	<502 PA>
EXP	U16	POWER AMPLIFIER PC board AS	NAAF-8245-1D	1	1B016545-1D	<502 GR>,<8250>
EXP	U16	POWER AMPLIFIER PC board AS	NAAF-8245-1E	1	1B016545-1E	<502 WT>
EXP	U16	POWER AMPLIFIER PC board AS	NAAF-8245-1F	1	1B016545-1F	<502 GK>
EXP	U16	POWER AMPLIFIER PC board AS	NAAF-8245-1H	1	1B016545-1H	<520>
EXP	U16	POWER AMPLIFIER PC board AS	NAAF-8245-1J	1	1B016545-1J	<502 GQ>
EXP	U16	POWER AMPLIFIER PC board AS	NAAF-8245-1K	1	1B016545-1K	<502 PT>
EXP	U17	POWER SWITCH PC board AS	NAAF-8246-1B	1	1B016546-1B	<502E>
EXP	U17	POWER SWITCH PC board AS	NAAF-8246-1C	1	1B016546-1C	<502 PA>
EXP	U17	POWER SWITCH PC board AS	NAAF-8246-1D	1	1B016546-1D	<502 GR>,<8250>
EXP	U17	POWER SWITCH PC board AS	NAAF-8246-1E	1	1B016546-1E	<502 WT>
EXP	U17	POWER SWITCH PC board AS	NAAF-8246-1F	1	1B016546-1F	<502 GK>
EXP	U17	POWER SWITCH PC board AS	NAAF-8246-1J	1	1B016546-1J	<502 GQ>
EXP	U17	POWER SWITCH PC board AS	NAAF-8246-1K	1	1B016546-1K	<502 PT>
EXP	U18	TERMINAL PC board AS	NAAF-8247-1A	1	1B016547-1A	<502 DD,DC>
EXP	U18	TERMINAL PC board AS	NAAF-8247-1B	1	1B016547-1B	<502E>
EXP	U18	TERMINAL PC board AS	NAAF-8247-1C	1	1B016547-1C	<502 PA>
EXP	U18	TERMINAL PC board AS	NAAF-8247-1D	1	1B016547-1D	<502 GR, 8250>
EXP	U18	TERMINAL PC board AS	NAAF-8247-1E	1	1B016547-1E	<502 WT>
EXP	U18	TERMINAL PC board AS	NAAF-8247-1F	1	1B016547-1F	<502 GK>
EXP	U18	TERMINAL PC board AS	NAAF-8247-1H	1	1B016547-1H	<520>
EXP	U18	TERMINAL PC board AS	NAAF-8247-1J	1	1B016547-1J	<502 GQ>
EXP	U18	TERMINAL PC board AS	NAAF-8247-1K	1	1B016547-1K	<502 PT>
EXP	U19	POWER SUPPLY PC board AS	NAAF-8248-1A	1	1B016548-1A	<502 DD,DC>
EXP	U19	POWER SUPPLY PC board AS	NAAF-8248-1B	1	1B016548-1B	<502E>
EXP	U19	POWER SUPPLY PC board AS	NAAF-8248-1C	1	1B016548-1C	<502 PA>
EXP	U19	POWER SUPPLY PC board AS	NAAF-8248-1D	1	1B016548-1D	<502 GR, 8250>
EXP	U19	POWER SUPPLY PC board AS	NAAF-8248-1E	1	1B016548-1E	<502 WT>
EXP	U19	POWER SUPPLY PC board AS	NAAF-8248-1F	1	1B016548-1F	<502 GK>
EXP	U19	POWER SUPPLY PC board AS	NAAF-8248-1H	1	1B016548-1H	<520>
EXP	U19	POWER SUPPLY PC board AS	NAAF-8248-1J	1	1B016548-1J	<502 GQ>

EXP	U19	POWER SUPPLY PC board AS	NAAF-8248-1K	1	1B016548-1K	<502 PT>
EXP	U20	TERMINAL PC board AS	NAAF-8249-1A	1	1B016549-1A	<502 DD,DC>
EXP	U20	TERMINAL PC board AS	NAAF-8249-1B	1	1B016549-1B	<502E>
EXP	U20	TERMINAL PC board AS	NAAF-8249-1C	1	1B016549-1C	<502 PA>
EXP	U20	TERMINAL PC board AS	NAAF-8249-1D	1	1B016549-1D	<502 GR, 8250>
EXP	U20	TERMINAL PC board AS	NAAF-8249-1E	1	1B016549-1E	<502 WT>
EXP	U20	TERMINAL PC board AS	NAAF-8249-1F	1	1B016549-1F	<502 GK>
EXP	U20	TERMINAL PC board AS	NAAF-8249-1H	1	1B016549-1H	<520>
EXP	U20	TERMINAL PC board AS	NAAF-8249-1J	1	1B016549-1J	<502 GQ>
EXP	U20	TERMINAL PC board AS	NAAF-8249-1K	1	1B016549-1K	<502 PT>
EXP	U21	VIDEO PC board AS	NAAF-8250-1A	1	1B016550-1A	<502 DD,DC>
EXP	U21	VIDEO PC board AS	NAAF-8250-1B	1	1B016550-1B	<502E>
EXP	U21	VIDEO PC board AS	NAAF-8250-1C	1	1B016550-1C	<502 PA>
EXP	U21	VIDEO PC board AS	NAAF-8250-1D	1	1B016550-1D	<502 GR, 8250>
EXP	U21	VIDEO PC board AS	NAAF-8250-1E	1	1B016550-1E	<502 WT>
EXP	U21	VIDEO PC board AS	NAAF-8250-1F	1	1B016550-1F	<502 GK>
EXP	U21	VIDEO PC board AS	NAAF-8250-1H	1	1B016550-1H	<520>
EXP	U21	VIDEO PC board AS	NAAF-8250-1J	1	1B016550-1J	<502 GQ>
EXP	U21	VIDEO PC board AS	NAAF-8250-1K	1	1B016550-1K	<502 PT>
EXP	U25	OUTLET TERMINAL PC board AS	NAETC-8254-1F	1	1B016554-1F	<502 GK>
EXP	U26	THERMAL SENSOR PC board AS	NAAF-8255-1A	1	1B016555-1A	<502 DD,DC>
EXP	U26	THERMAL SENSOR PC board AS	NAAF-8255-1B	1	1B016555-1B	<502E>
EXP	U26	THERMAL SENSOR PC board AS	NAAF-8255-1C	1	1B016555-1C	<502 PA>
EXP	U26	THERMAL SENSOR PC board AS	NAAF-8255-1D	1	1B016555-1D	<502 GR, 8250>
EXP	U26	THERMAL SENSOR PC board AS	NAAF-8255-1E	1	1B016555-1E	<502 WT>
EXP	U26	THERMAL SENSOR PC board AS	NAAF-8255-1F	1	1B016555-1F	<502 GK>
EXP	U26	THERMAL SENSOR PC board AS	NAAF-8255-1H	1	1B016555-1H	<520>
EXP	U26	THERMAL SENSOR PC board AS	NAAF-8255-1J	1	1B016555-1J	<502 GQ>
EXP	U26	THERMAL SENSOR PC board AS	NAAF-8255-1K	1	1B016555-1K	<502 PT>
EXP	U27	TUNER UNIT	FAE385-A02F	1	240146	<502 DD, DC>,<520>
EXP	U27 or	TUNER UNIT	TFCE1U114B	(1)	240134A	<502 DD, DC>,<520>
EXP	U27 or	TUNER UNIT	ENG06501QR	(1)	240138A	<502 DD, DC>,<520>
EXP	U27	TUNER UNIT	FAE485-E02F	1	240147	<502 PA, PT, WT, GK, GQ>
EXP	U27 or	TUNER UNIT	TFCE1E512A	(1)	240135	<502 PA, PT, WT, GK, GQ>
EXP	U27 or	TUNER UNIT	ENG07501QR	(1)	240139A	<502 PA, PT, WT, GK, GQ>
EXP	U27	TUNER UNIT	FAE485-E02F	1	240147	<502E>
EXP	U27 or	TUNER UNIT	TFCE1E512A	(1)	240135	<502E>
EXP	U27 or	TUNER UNIT	ENG07501QR	(1)	240139A	<502E>
EXP	U27	TUNER UNIT	TFCE1E512A	1	240135	<502 GR>,<8250>

EXP. **<Notes>**

EXP. When replacement the following the transistor,made from the same HFE rank as the original type.

EXP. Q6050 - Q6055, Q6060 - Q6065

TX-SR502/E/8250/HT-R520

PC BOARD PARTS LIST

U01 PREAMPLIFIER PC BOARD (NADG-8230-1A/1B/1C/1D/1F)

U02 DISPLAY PC BOARD (NADIS-8231-1A/1B/1C/1D/1F)

U03 OPERATION SWITCH PC BOARD (NASW-8232-1A/1B/1C/1D/1F)

U04 HEADPHONE TERMINAL PC BOARD (NAETC-8233-1A/1B/1C/1D/1F)

U05 VIDEO3 TERMINAL PC BOARD (NAETC-8234-1A/1B/1C/1D/1F)

<Notes> Parts are indicated collectively, without dividing for above-mentioned each substrate.

NOTE : THE COMPONENTS IDENTIFIED BY THE MARK ! ARE CRITICAL FOR RISK OF FIRE AND ELECTRIC SHOCK. REPLACE ONLY WITH PART NUMBER SPECIFIED.

<Notes>

<**502**>:TX-SR502

<**502E**>:TX-SR502E(European model)

<**8250**>:TX-SR8250(Chinese model)

<**520**>:HT-R520(American model & Canadian model)

<**DC**> : Canadian model

<**DD**> : American model

<**GK**> : Korean model

<**GQ**> : Hong kong model

<**GR**> : Chinese model

<**PA**> : Australian model

<**PP**> : European model

<**PT**> : Asian model (230-240V)

<**WT**> : World wide model

	REF. NO.	NAME	DESCRIPTION	Q'TY	PART NO	REMARKS
PCB	U7501	REMO SENS	PIC-37043TH2	1	241336	
PCB	Q181	IC	BU1924FS	1	22242120R2	<502E>
PCB	Q301	IC	BD3817KS	1	22242117R3	
PCB	Q302	IC	NJM4565M-D	1	22241383R2	
PCB	Q302 or	IC	MPC4570G2-T1(MST)	(1)	22240489R1NE	
PCB	Q302 or	IC	NJM4565M	(1)	22240581R2	
PCB	Q302 or	IC	HA17558A	(1)	22242126R2	

PCB	Q305	IC	NJM4565M-D	1	22241383R2	
PCB	Q305 or	IC	MPC4570G2-T1(MST)	(1)	22240489R1NE	
PCB	Q305 or	IC	NJM4565M	(1)	22240581R2	
PCB	Q305 or	IC	HA17558A	(1)	22242126R2	
PCB	Q306	TR	RN2402	1	2214530R2	
PCB	Q306 or	TR	KRA102S	(1)	2216220R2	
PCB	Q307	TR	RN1441	1	2215410R2	
PCB	Q308	TR	RN1441	1	2215410R2	
PCB	Q312	TR	RN1441	1	2215410R2	
PCB	Q313	TR	RN1441	1	2215410R2	
PCB	Q321	IC(REGULATOR)	78L07(SMT)	1	222780073R2	
PCB	Q322	IC(REGULATOR)	79L07(SMT)	1	222790073R2	
PCB	Q701	IC	CS494003CQZ	1	22242039R3	
PCB	Q702	IC	MX29LV040(TXSR502)	1	22242119R3	
PCB	Q703	IC	TC7WU04FU	1	22240935R2	
PCB	Q800	IC	AK4588VQ	1	22242118R3	
PCB	Q801	IC	NJM4565M-D	1	22241383R2	
PCB	Q801 or	IC	MPC4570G2-T1(MST)	(1)	22240489R1NE	
PCB	Q801 or	IC	NJM4565M	(1)	22240581R2	
PCB	Q801 or	IC	HA17558A	(1)	22242126R2	
PCB	Q802	IC	NJM4565M-D	1	22241383R2	
PCB	Q802 or	IC	MPC4570G2-T1(MST)	(1)	22240489R1NE	
PCB	Q802 or	IC	NJM4565M	(1)	22240581R2	
PCB	Q802 or	IC	HA17558A	(1)	22242126R2	
PCB	Q803	IC	NJM4565M-D	1	22241383R2	
PCB	Q803 or	IC	MPC4570G2-T1(MST)	(1)	22240489R1NE	
PCB	Q803 or	IC	NJM4565M	(1)	22240581R2	
PCB	Q803 or	IC	HA17558A	(1)	22242126R2	
PCB	Q804	IC	NJM4565M-D	1	22241383R2	
PCB	Q804 or	IC	MPC4570G2-T1(MST)	(1)	22240489R1NE	
PCB	Q804 or	IC	NJM4565M	(1)	22240581R2	
PCB	Q804 or	IC	HA17558A	(1)	22242126R2	
PCB	Q6402	IC(REGURATOR)	7812HF(TA7812S)	1	222780124TOS	
PCB	Q6402 or	IC(REGULATOR)	78M12HF	(1)	222780125	
PCB	Q6402A	SCREW	3P+10FN(BC)	1	82143010	
PCB	Q6402B	HEAT SINK	RAD-183	1	27160526	
PCB	Q6402C	TAPE	TAPE(CLOTH-16U)	1	29110083	
PCB	Q6403	IC(REGURATOR)	79012HF(TA79012S)	1	222790124TOS	
PCB	Q6403 or	IC(REGULATOR)	79M12HF	(1)	222790125	
PCB	Q6405	IC(REGURATOR)	7812HF(TA7812S)	1	222780124TOS	
PCB	Q6405 or	IC(REGULATOR)	78M12HF	(1)	222780125	
PCB	Q6405A	SCREW	3P+10FN(BC)	1	82143010	
PCB	Q6406	IC(REGURATOR)	TA4805S	1	222780059TOS	
PCB	Q6406 or	IC(REGULATOR)	MPC2905HF	(1)	22278005DNE	
PCB	Q6406A	SCREW	3P+10FN(BC)	1	82143010	
PCB	Q6407	TR	2SB1068-K	1	2212853	<502 PA, PT, GK, GQ, GR>
PCB	Q6407	TR	2SB1068-K	1	2212853	<502E>,<8250>
PCB	Q6408	TR	RN1402	1	2214470R2	<502 PA, PT, GK, GQ, GR>
PCB	Q6408 or	TR	KRC102S	(1)	2216190R2	<502 PA, PT, GK, GQ, GR>
PCB	Q6408 or	TR	DTC114EKA	(1)	2216250R2	<502 PA, PT, GK, GQ, GR>
PCB	Q6408	TR	RN1402	1	2214470R2	<502E>,<8250>
PCB	Q6408 or	TR	KRC102S	(1)	2216190R2	<502E>,<8250>
PCB	Q6408 or	TR	DTC114EKA	(1)	2216250R2	<502E>,<8250>
PCB	Q7001	TR	RN1404	1	2214490R2	
PCB	Q7001 or	TR	KRC104S	(1)	2216210R2	
PCB	Q7002	IC	TC74VHC541FT	1	22274541ER2TO	
PCB	Q7003	IC	TC74HCT7007AF	1	222740077R2TO	
PCB	Q7004	IC	BA33C25FP	1	22241778R2	
PCB	Q7004A	HEAT SINK	RAD-202	1	27160552	
PCB	Q7006	TR	RN1404	1	2214490R2	
PCB	Q7006 or	TR	KRC104S	(1)	2216210R2	
PCB	Q7007	TR	RN1404	1	2214490R2	
PCB	Q7007 or	TR	KRC104S	(1)	2216210R2	
PCB	Q7008	IC	MPD784225GC-253-8BT	1	22242167R3	
PCB	Q7301	IC	IC42S16100	1	22242123R3	<520>
PCB	Q7301 or	IC	IC42S16100	(1)	22242123R2	<520>
PCB	Q7301 or	IC	K4S161622H-UC60	(1)	22242152R2	<520>
PCB	Q7501	FL TUBE	HNA-16SM10T	1	212249A	
PCB	Q7501A	HOLDER	(FL)	1	27191222	
PCB	Q7502	IC	MPD780232GC-096-8BT	1	22242116R3	
PCB	Q7503	TR	KTC3875-GR	1	2216175R2	
PCB	Q7503 or	TR	2SC2712-GR	(1)	2213145R2	
PCB	Q7504	TR	KRA103S	1	2216230R2	

PCB	Q7504 or	TR	RN2403	(1)	2214540R2	
PCB	Q7506	TR	KRC102S	1	2216190R2	
PCB	Q7506 or	TR	RN1402	(1)	2214470R2	
PCB	Q7507	TR	KRC102S	1	2216190R2	<502 PA, PT, GK, GQ, GR>
PCB	Q7507	TR	KRC102S	1	2216190R2	<502E>,<8250>
PCB	Q9501	TR	2SA1015-GR	1	2211455	
PCB	D109	ZENER D	UDZS5.1B	1	224550510R2	
PCB	D109 or	ZENER D	UDZ5.1B	(1)	224490510R2	
PCB	D109 or	ZENER D	HZU5.1B	(1)	224660514R2	
PCB	D801	C-DIODE	1SS352	1	223234R2	
PCB	D801 or	C-DIODE	1SS355	(1)	223269R2	
PCB	D802	C-DIODE	1SS352	1	223234R2	
PCB	D802 or	C-DIODE	1SS355	(1)	223269R2	
PCB	D805	C-DIODE	1SS352	1	223234R2	
PCB	D805 or	C-DIODE	1SS355	(1)	223269R2	
PCB	D806	C-DIODE	1SS352	1	223234R2	
PCB	D806 or	C-DIODE	1SS355	(1)	223269R2	
PCB	D7001	C-DIODE	1SS352	1	223234R2	
PCB	D7001 or	C-DIODE	1SS355	(1)	223269R2	
PCB	D7002	C-DIODE	1SS352	1	223234R2	
PCB	D7002 or	C-DIODE	1SS355	(1)	223269R2	
PCB	D7003	C-DIODE	1SS352	1	223234R2	
PCB	D7003 or	C-DIODE	1SS355	(1)	223269R2	
PCB	D7004	C-DIODE	1SS352	1	223234R2	
PCB	D7004 or	C-DIODE	1SS355	(1)	223269R2	
PCB	D7501	ZENER D	UDZS8.2B	1	224550820R2	
PCB	D7501 or	ZENER D	UDZ8.2B	(1)	224490820R2	
PCB	D7501 or	ZENER D	HZU8.2B	(1)	224660824R2	
PCB	D7502	ZENER D	UDZS5.1B	1	224550510R2	
PCB	D7502 or	ZENER D	UDZ5.1B	(1)	224490510R2	
PCB	D7502 or	ZENER D	HZU5.1B	(1)	224660514R2	
PCB	D7503	C-DIODE	1SS355	1	223269R2	
PCB	D7503 or	C-DIODE	1SS352	(1)	223234R2	
PCB	D7504	LED	SEL2E10C	1	225374	<502 PA,GK,GQ,GR,PT,WT>
PCB	D7504	LED	SEL2E10C	1	225374	<502E>,<8250>
PCB	D7505	LED	SLR-56VRTB7	1	225431	
PCB	D7505 or	LED	SEL4110R	(1)	225290	
PCB	D7507	C-DIODE	1SS352	1	223234R2	
PCB	D7507 or	C-DIODE	1SS355	(1)	223269R2	
PCB	D7702	ZENER D	UDZS6.2B	1	224550620R2	
PCB	D7702 or	ZENER D	UDZ6.2B	(1)	224490620R2	
PCB	D7702 or	ZENER D	HZU6.2B	(1)	224660624R2	
PCB	D9502	DIODE	RL1N4003	1	22380260	
PCB	D9502 or	DIODE	GP104003E	(1)	22380035	
PCB	D9503	DIODE	RL1N4003	1	22380260	
PCB	D9503 or	DIODE	GP104003E	(1)	22380035	
PCB	D9504	DIODE	RL1N4003	1	22380260	
PCB	D9504 or	DIODE	GP104003E	(1)	22380035	
PCB	D9505	DIODE	RL1N4003	1	22380260	
PCB	D9505 or	DIODE	GP104003E	(1)	22380035	
PCB	D9506	DIODE	RL1N4003	1	22380260	
PCB	D9506 or	DIODE	GP104003E	(1)	22380035	
PCB	D9507	DIODE	RL1N4003	1	22380260	
PCB	D9507 or	DIODE	GP104003E	(1)	22380035	
PCB	D9508	ZENER D	UDZS27B	1	224552700R2	
PCB	D9508 or	ZENER D	UDZ27B	(1)	224492700R2	
PCB	D9508 or	ZENER D	HZU27B	(1)	224662704R2	
PCB	D9513	DIODE	D2SB80A	1	22380341F	
PCB	L181	CHOKE COIL	NCH-1477	1	231237K220R2	<502E>
PCB	L701	CHOKE COIL	NCH-1471	1	231237M022R2	
PCB	L701 or	CHOKE COIL	NCH-1587-022K	(1)	233533K022R2	
PCB	L702	CHOKE COIL	NCH-1471	1	231237M022R2	
PCB	L702 or	CHOKE COIL	NCH-1587-022K	(1)	233533K022R2	
PCB	L703	CHOKE COIL	NCH-1477	1	231237K220R2	
PCB	L751	CHOKE COIL	NCH-1471	1	231237M022R2	
PCB	L751 or	CHOKE COIL	NCH-1587-022K	(1)	233533K022R2	
PCB	L781	EMIFIL	BK1608LM182-T	1	230958R1	
PCB	L782	EMIFIL	BK1608LM182-T	1	230958R1	
PCB	L783	CHOKE COIL	NCH-1477	1	231237K220R2	
PCB	L800	CHOKE COIL	NCH-1471	1	231237M022R2	
PCB	L800 or	CHOKE COIL	NCH-1587-022K	(1)	233533K022R2	
PCB	L801	CHOKE COIL	NCH-1471	1	231237M022R2	
PCB	L801 or	CHOKE COIL	NCH-1587-022K	(1)	233533K022R2	

PCB	L802	EMIFIL	BK1608LM182-T	1	230958R1	
PCB	L803	CHOKE COIL	NCH-1471	1	231237M022R2	
PCB	L803 or	CHOKE COIL	NCH-1587-022K	(1)	233533K022R2	
PCB	L7001	CHOKE COIL	NCH-1479	1	231237K470R2	
PCB	L7002	CHOKE COIL	NCH-1471	1	231237M022R2	
PCB	L7002 or	CHOKE COIL	NCH-1587-022K	(1)	233533K022R2	
PCB	L7301	CHOKE COIL	NCH-1471	1	231237M022R2	<520>
PCB	L7301 or	CHOKE COIL	NCH-1587-022K	(1)	233533K022R2	<520>
PCB	L7302	EMIFIL	BK1608LL241-T	1	230959R1	
PCB	L7501	CHOKE COIL	NCH-1471	1	231237M022R2	<502 DD, DC>,<520>
PCB	L7501 or	CHOKE COIL	NCH-1587-022K	(1)	233533K022R2	<502 DD, DC>,<520>
PCB	L7502	CHOKE COIL	NCH-1471	1	231237M022R2	<502 DD, DC>,<520>
PCB	L7502 or	CHOKE COIL	NCH-1587-022K	(1)	233533K022R2	<502 DD, DC>,<520>
PCB	L7503	CHOKE COIL	NCH-1471	1	231237M022R2	<502 DD, DC>,<520>
PCB	L7503 or	CHOKE COIL	NCH-1587-022K	(1)	233533K022R2	<502 DD, DC>,<520>
PCB	L7504	CHOKE COIL	NCH-1477	1	231237K220R2	
PCB	L7505	CHOKE COIL	NCH-1477	1	231237K220R2	
PCB	X181	XTL	AF6146CG	1	3010203	<502E>
PCB	X7001	CERA LOCK	CSTCE12M5G52-R0	1	3010361R2	
PCB	X7501	CERA LOCK	CST5.00MGW	1	3010242	
PCB	X781	CERA LOCK	CSTCV12.2MTJ0C4	1	3010324R2	
PCB	C101	ELECT C	CE04W50V3.3M(SC)	1	394780337	
PCB	C101 or	VR C	CE04W50V-3.3M(VR)	(1)	394680337	
PCB	C103	ELECT C	CE04W50V3.3M(SC)	1	394780337	
PCB	C103 or	VR C	CE04W50V-3.3M(VR)	(1)	394680337	
PCB	C104	C-CERA C	CC725CH1H-101J1	1	342101014R1	
PCB	C106	C-CERA C	CC725CH1H-101J1	1	342101014R1	
PCB	C109	ELECT C	CE04W50V100M(SC)	1	394781017	
PCB	C109 or	VR C	CE04W50V-100M(VR)	(1)	394681017	
PCB	C181	ELECT C	CE04W50V2.2M(SC)	1	394780227	<502E>
PCB	C181 or	VR C	CE04W50V-2.2M(VR)	(1)	394680227	<502E>
PCB	C182	C-CERA C	CK725B1H-103K1	1	332101035R1	<502E>
PCB	C183	C-CERA C	CC725CH1H-561J1	1	342105614R1	<502E>
PCB	C184	ELECT C	CE04W16V47M(SC)	1	394744707	<502E>
PCB	C184 or	VR C	CE04W16V-47M(VR)	(1)	394644707	<502E>
PCB	C185	C-CERA C	CK725F1E-104Z1	1	332161040R1	<502E>
PCB	C186	C-CERA C	CC725CH1H-330J1	1	342103304R1	<502E>
PCB	C187	C-CERA C	CC725CH1H-330J1	1	342103304R1	<502E>
PCB	C253	C-CERA C	CK725F1E-104Z1	1	332161040R1	
PCB	C261	C-CERA C	CC725CH1H-101J1	1	342101014R1	<502 DD,DC>,<520>
PCB	C261	C-CERA C	CC725CH1H-471J1	1	342104714R1	<502 PA,GK,GQ,GR,PT,WT>
PCB	C261	C-CERA C	CC725CH1H-471J1	1	342104714R1	<502E>,<8250>
PCB	C262	C-CERA C	CC725CH1H-101J1	1	342101014R1	<502 DD,DC>,<520>
PCB	C262	C-CERA C	CC725CH1H-471J1	1	342104714R1	<502 PA,GK,GQ,GR,PT,WT>
PCB	C262	C-CERA C	CC725CH1H-471J1	1	342104714R1	<502E>,<8250>
PCB	C263	C-CERA C	CK725F1E-104Z1	1	332161040R1	
PCB	C300	TF C	ECQ-B50V-101K	1	374721015	<502 DD, DC>,<520>
PCB	C300	TF C	ECQ-B50V-471J	1	374724714	<502 PA,GK,GQ,GR,PT,WT>
PCB	C300	TF C	ECQ-B50V-471J	1	374724714	<502E>,<8250>
PCB	C301	TF C	ECQ-B50V-101K	1	374721015	<502 DD, DC>,<520>
PCB	C301	TF C	ECQ-B50V-471J	1	374724714	<502 PA,GK,GQ,GR,PT,WT>
PCB	C301	TF C	ECQ-B50V-471J	1	374724714	<502E>,<8250>
PCB	C302	C-CERA C	CC725CH1H-101J1	1	342101014R1	
PCB	C303	C-CERA C	CC725CH1H-101J1	1	342101014R1	
PCB	C304	C-CERA C	CC725CH1H-101J1	1	342101014R1	<502 DD, DC>,<520>
PCB	C304	C-CERA C	CC725CH1H-471J1	1	342104714R1	<502 PA,GK,GQ,GR,PT,WT>
PCB	C304	C-CERA C	CC725CH1H-471J1	1	342104714R1	<502E>,<8250>
PCB	C305	C-CERA C	CC725CH1H-101J1	1	342101014R1	<502 DD, DC>,<520>
PCB	C305	C-CERA C	CC725CH1H-471J1	1	342104714R1	<502 PA,GK,GQ,GR,PT,WT>
PCB	C305	C-CERA C	CC725CH1H-471J1	1	342104714R1	<502E>,<8250>
PCB	C308	CERA C	CK45F50V-103Z	1	335621030	
PCB	C310	C-CERA C	CC725CH1H-101J1	1	342101014R1	<502 DD, DC>,<520>
PCB	C310	C-CERA C	CC725CH1H-471J1	1	342104714R1	<502 PA,GK,GQ,GR,PT,WT>
PCB	C310	C-CERA C	CC725CH1H-471J1	1	342104714R1	<502E>,<8250>
PCB	C311	C-CERA C	CC725CH1H-101J1	1	342101014R1	<502 DD, DC><520>
PCB	C311	C-CERA C	CC725CH1H-471J1	1	342104714R1	<502 PA,GK,GQ,GR,PT,WT>
PCB	C311	C-CERA C	CC725CH1H-471J1	1	342104714R1	<502E><8250>
PCB	C312	C-CERA C	CC725CH1H-101J1	1	342101014R1	
PCB	C313	C-CERA C	CC725CH1H-101J1	1	342101014R1	
PCB	C314	C-CERA C	CC725CH1H-101J1	1	342101014R1	<502 DD, DC>,<520>
PCB	C314	C-CERA C	CC725CH1H-471J1	1	342104714R1	<502 PA,GK,GQ,GR,PT,WT>
PCB	C314	C-CERA C	CC725CH1H-471J1	1	342104714R1	<502E><8250>
PCB	C315	C-CERA C	CC725CH1H-101J1	1	342101014R1	<502 DD, DC>,<,520>

PCB	C315	C-CERA C	CC725CH1H-471J1	1	342104714R1	<502 PA,GK,GQ,GR,PT,WT>
PCB	C315	C-CERA C	CC725CH1H-471J1	1	342104714R1	<502E>,<8250>
PCB	C316	C-CERA C	CC725CH1H-101J1	1	342101014R1	<502 DD, DC>,<520>
PCB	C316	C-CERA C	CC725CH1H-471J1	1	342104714R1	<502 PA,GK,GQ,GR,PT,WT>
PCB	C316	C-CERA C	CC725CH1H-471J1	1	342104714R1	<502E>,<8250>
PCB	C317	C-CERA C	CC725CH1H-101J1	1	342101014R1	<502 DD, DC>,<520>
PCB	C317	C-CERA C	CC725CH1H-471J1	1	342104714R1	<502 PA,GK,GQ,GR,PT,WT>
PCB	C317	C-CERA C	CC725CH1H-471J1	1	342104714R1	<502E>,<8250>
PCB	C318	C-CERA C	CC725CH1H-101J1	1	342101014R1	<502 DD, DC>,<520>
PCB	C318	C-CERA C	CC725CH1H-471J1	1	342104714R1	<502 PA,GK,GQ,GR,PT,WT>
PCB	C318	C-CERA C	CC725CH1H-471J1	1	342104714R1	<502E>,<8250>
PCB	C319	C-CERA C	CC725CH1H-101J1	1	342101014R1	<502 DD, DC>,<520>
PCB	C319	C-CERA C	CC725CH1H-471J1	1	342104714R1	<502 PA,GK,GQ,GR,PT,WT>
PCB	C319	C-CERA C	CC725CH1H-471J1	1	342104714R1	<502E>,<8250>
PCB	C320	C-CERA C	CC725CH1H-101J1	1	342101014R1	<502 DD, DC>,<520>
PCB	C320	C-CERA C	CC725CH1H-471J1	1	342104714R1	<502 PA,GK,GQ,GR,PT,WT>
PCB	C320	C-CERA C	CC725CH1H-471J1	1	342104714R1	<502E>,<8250>
PCB	C321	C-CERA C	CC725CH1H-101J1	1	342101014R1	<502 DD, DC>,<520>
PCB	C321	C-CERA C	CC725CH1H-471J1	1	342104714R1	<502 PA,GK,GQ,GR,PT,WT>
PCB	C321	C-CERA C	CC725CH1H-471J1	1	342104714R1	<502E>,<8250>
PCB	C322	C-CERA C	CK725F1E-104Z1	1	332161040R1	
PCB	C323	C-CERA C	CK725F1E-104Z1	1	332161040R1	
PCB	C325	C-CERA C	CK725F1E-104Z1	1	332161040R1	
PCB	C326	C-CERA C	CK725F1E-104Z1	1	332161040R1	
PCB	C327	C-CERA C	CC725CH1H-330J1	1	342103304R1	
PCB	C328	C-CERA C	CC725CH1H-330J1	1	342103304R1	
PCB	C341	ELECT C	CE04W16V100M(SC)	1	394741017	
PCB	C341 or	VR C	CE04W16V-100M(VR)	(1)	394641017	
PCB	C342	ELECT C	CE04W16V100M(SC)	1	394741017	
PCB	C342 or	VR C	CE04W16V-100M(VR)	(1)	394641017	
PCB	C343	C-CERA C	CK725F1E-104Z1	1	332161040R1	
PCB	C344	C-CERA C	CK725F1E-104Z1	1	332161040R1	
PCB	C345	VX C	CE04W16V-10M(VX)	1	393341007	
PCB	C346	VX C	CE04W16V-10M(VX)	1	393341007	
PCB	C347	VX C	CE04W16V-10M(VX)	1	393341007	
PCB	C348	VX C	CE04W16V-10M(VX)	1	393341007	
PCB	C349	VX C	CE04W16V-10M(VX)	1	393341007	
PCB	C350	C-CERA C	CC725CH1H-221J1	1	342102214R1	
PCB	C351	C-CERA C	CC725CH1H-330J1	1	342103304R1	
PCB	C352	C-CERA C	CK725F1E-104Z1	1	332161040R1	
PCB	C353	VX C	CE04W16V-47M(VX)	1	393344707	
PCB	C354	VX C	CE04W16V-47M(VX)	1	393344707	
PCB	C358	VX C	CE04W16V-47M(VX)	1	393344707	
PCB	C359	ELECT C	CE04W16V10M(SC)	1	394741007	
PCB	C359 or	VR C	CE04W16V-10M(VR)	(1)	394641007	
PCB	C360	C-CERA C	CK732B1C-474K	1	337394745R1	
PCB	C361	C-CERA C	CK725B1A-224K1	1	332132245R1	
PCB	C362	ELECT C	CE04W16V10M(SC)	1	394741007	
PCB	C362 or	VR C	CE04W16V-10M(VR)	(1)	394641007	
PCB	C363	VX C	CE04W16V-10M(VX)	1	393341007	
PCB	C364	VX C	CE04W16V-10M(VX)	1	393341007	
PCB	C365	C-FILM C	ECHU50V-222J	1	373022224R2	
PCB	C366	C-CERA C	CK725F1E-104Z1	1	332161040R1	
PCB	C367	C-CERA C	CK725F1E-104Z1	1	332161040R1	
PCB	C368	VX C	CE04W16V-10M(VX)	1	393341007	
PCB	C369	C-FILM C	ECHU16V-472J	1	373044724R2	
PCB	C370	C-FILM C	ECHU16V-472J	1	373044724R2	
PCB	C371	C-FILM C	ECHU16V-104J	1	373041044R2	
PCB	C372	C-FILM C	ECHU16V-104J	1	373041044R2	
PCB	C373	VX C	CE04W16V-10M(VX)	1	393341007	
PCB	C374	VX C	CE04W16V-10M(VX)	1	393341007	
PCB	C376	C-FILM C	ECHU16V-104J	1	373041044R2	
PCB	C381	C-FILM C	ECHU16V-104J	1	373041044R2	
PCB	C390	C-CERA C	CC725CH1H-101J1	1	342101014R1	
PCB	C391	C-CERA C	CC725CH1H-101J1	1	342101014R1	
PCB	C392	C-CERA C	CC725CH1H-101J1	1	342101014R1	
PCB	C393	C-CERA C	CC725CH1H-101J1	1	342101014R1	
PCB	C394	C-CERA C	CC725CH1H-101J1	1	342101014R1	
PCB	C395	C-CERA C	CC725CH1H-101J1	1	342101014R1	
PCB	C701	ELECT C	CE04W16V47M(SC)	1	394744707	
PCB	C701 or	VR C	CE04W16V-47M(VR)	(1)	394644707	
PCB	C702	C-CERA C	CK725F1E-104Z1	1	332161040R1	
PCB	C703	ELECT C	CE04W16V47M(SC)	1	394744707	

PCB	C703 or	VR C	CE04W16V-47M(VR)	(1)	394644707
PCB	C704	CHIP TANTAL	CS772SB1C-2.2M	1	395640227R2
PCB	C705	C-CERA C	CC732CH1H-122J	1	347341224R2
PCB	C706	C-CERA C	CC725CH1H-680J1	1	342106804R1
PCB	C707	C-CERA C	CK725F1E-104Z1	1	332161040R1
PCB	C708	C-CERA C	CK725F1E-104Z1	1	332161040R1
PCB	C709	C-CERA C	CK725F1E-104Z1	1	332161040R1
PCB	C710	C-CERA C	CK725F1E-104Z1	1	332161040R1
PCB	C711	C-CERA C	CK725F1E-104Z1	1	332161040R1
PCB	C712	C-CERA C	CK725F1E-104Z1	1	332161040R1
PCB	C713	TF C	ECQ-V50V-104J	1	374721044
PCB	C714	C-CERA C	CK725F1E-104Z1	1	332161040R1
PCB	C715	C-CERA C	CK725F1E-104Z1	1	332161040R1
PCB	C716	C-CERA C	CK725F1E-104Z1	1	332161040R1
PCB	C717	C-CERA C	CK725F1E-104Z1	1	332161040R1
PCB	C718	C-CERA C	CK725F1E-104Z1	1	332161040R1
PCB	C719	C-CERA C	CK725F1E-104Z1	1	332161040R1
PCB	C720	C-CERA C	CC725CH1H-101J1	1	342101014R1
PCB	C721	C-CERA C	CK725F1E-104Z1	1	332161040R1
PCB	C722	C-CERA C	CK725F1E-104Z1	1	332161040R1
PCB	C751	TF C	ECQ-V50V-104J	1	374721044
PCB	C752	C-CERA C	CK725F1E-104Z1	1	332161040R1
PCB	C781	C-CERA C	CK725F1E-104Z1	1	332161040R1
PCB	C800	C-CERA C	CC725CH1H-330J1	1	342103304R1
PCB	C804	VX C	CE04W50V-2.2M(VX)	1	393380227
PCB	C805	C-CERA C	CK725F1E-104Z1	1	332161040R1
PCB	C806	C-CERA C	CK725F1E-104Z1	1	332161040R1
PCB	C807	ELECT C	CE04W6.3V100M(SC)	1	394721017
PCB	C807 or	VR C	CE04W6.3V-100M(VR)	(1)	394621017
PCB	C808	C-CERA C	CK725F1E-104Z1	1	332161040R1
PCB	C809	ELECT C	CE04W6.3V330M(SC)	1	394723317
PCB	C809 or	VR C	CE04W6.3V-330M(VR)	(1)	394623317
PCB	C811	C-CERA C	CK725F1E-104Z1	1	332161040R1
PCB	C813	ELECT C	CE04W6.3V330M(SC)	1	394723317
PCB	C813 or	VR C	CE04W6.3V-330M(VR)	(1)	394623317
PCB	C814	C-CERA C	CC725CH1H-330J1	1	342103304R1
PCB	C815	C-CERA C	CK725F1E-104Z1	1	332161040R1
PCB	C816	ELECT C	CE04W6.3V100M(SC)	1	394721017
PCB	C816 or	VR C	CE04W6.3V-100M(VR)	(1)	394621017
PCB	C817	C-CERA C	CC725CH1H-330J1	1	342103304R1
PCB	C818	C-CERA C	CC725CH1H-330J1	1	342103304R1
PCB	C820	C-FILM C	ECHU50V-821J	1	373028214R2
PCB	C821	C-FILM C	ECHU50V-821J	1	373028214R2
PCB	C822	C-FILM C	ECHU50V-821J	1	373028214R2
PCB	C823	C-FILM C	ECHU16V-822J	1	373048224R2
PCB	C824	C-FILM C	ECHU50V-821J	1	373028214R2
PCB	C825	C-FILM C	ECHU50V-821J	1	373028214R2
PCB	C826	C-FILM C	ECHU50V-821J	1	373028214R2
PCB	C829	C-FILM C	ECHU50V-122J	1	373021224R2
PCB	C830	C-FILM C	ECHU50V-101J	1	373021014R2
PCB	C831	C-FILM C	ECHU50V-122J	1	373021224R2
PCB	C832	C-FILM C	ECHU50V-101J	1	373021014R2
PCB	C833	C-FILM C	ECHU50V-122J	1	373021224R2
PCB	C834	C-FILM C	ECHU50V-101J	1	373021014R2
PCB	C835	C-FILM C	ECHU50V-101J	1	373021014R2
PCB	C836	C-FILM C	ECHU16V-123J	1	373041234R2
PCB	C837	C-FILM C	ECHU50V-122J	1	373021224R2
PCB	C838	C-FILM C	ECHU50V-101J	1	373021014R2
PCB	C839	C-FILM C	ECHU50V-122J	1	373021224R2
PCB	C840	C-FILM C	ECHU50V-101J	1	373021014R2
PCB	C841	C-FILM C	ECHU50V-122J	1	373021224R2
PCB	C842	C-FILM C	ECHU50V-101J	1	373021014R2
PCB	C843	ELECT C	CE04W16V220M(SC)	1	394742217
PCB	C843 or	VR C	CE04W16V-220M(VR)	(1)	394642217
PCB	C844	ELECT C	CE04W16V220M(SC)	1	394742217
PCB	C844 or	VR C	CE04W16V-220M(VR)	(1)	394642217
PCB	C846	VX C	CE04W16V-10M(VX)	1	393341007
PCB	C847	VX C	CE04W16V-10M(VX)	1	393341007
PCB	C850	VX C	CE04W16V-10M(VX)	1	393341007
PCB	C851	VX C	CE04W16V-10M(VX)	1	393341007
PCB	C852	VX C	CE04W16V-10M(VX)	1	393341007
PCB	C853	VX C	CE04W16V-47M(VX)	1	393344707
PCB	C854	VX C	CE04W16V-10M(VX)	1	393341007

PCB	C855	VX C	CE04W16V-10M(VX)	1	393341007	
PCB	C856	VX C	CE04W16V-10M(VX)	1	393341007	
PCB	C6401	TF C	ECQ-V50V-104J	1	374721044	
PCB	C6403	C-CERA C	CK725F1H-223Z1	1	332152230R1	
PCB	C6404	ELECT C	CE04W16V10M(SC)	1	394741007	
PCB	C6404 or	VR C	CE04W16V-10M(VR)	(1)	394641007	
PCB	C6405	C-CERA C	CK725F1H-223Z1	1	332152230R1	
PCB	C6406	ELECT C	CE04W16V10M(SC)	1	394741007	
PCB	C6406 or	VR C	CE04W16V-10M(VR)	(1)	394641007	
PCB	C6409	C-CERA C	CK725F1H-223Z1	1	332152230R1	
PCB	C6410	ELECT C	CE04W16V10M(SC)	1	394741007	
PCB	C6410 or	VR C	CE04W16V-10M(VR)	(1)	394641007	
PCB	C6411	C-CERA C	CK725F1H-223Z1	1	332152230R1	
PCB	C6412	ELECT C	CE04W16V330M(SC)	1	394743317	
PCB	C6412 or	VX C	CE04W16V-330M(VX)	(1)	393343317	
PCB	C6412 or	VR C	CE04W16V-330M(VR)	(1)	394643317	
PCB	C6421	C-CERA C	CK725F1E-104Z1	1	332161040R1	
PCB	C7001	EDL C	DX-5R5L104	1	3000078	
PCB	C7001 or	EDL C	FMC0H104Z	(1)	3000120	
PCB	C7001 or	EDL C	SCDA5R5104A	(1)	3000121	
PCB	C7002	ELECT C	CE04W6.3V100M(SC)	1	394721017	
PCB	C7002 or	VR C	CE04W6.3V-100M(VR)	(1)	394621017	
PCB	C7003	C-CERA C	CK725F1E-104Z1	1	332161040R1	
PCB	C7004	ELECT C	CE04W50V1.0M(SC)	1	394780107	
PCB	C7004 or	VR C	CE04W50V-1M(VR)	(1)	394680107	
PCB	C7005	ELECT C	CE04W6.3V100M(SC)	1	394721017	
PCB	C7005 or	VR C	CE04W6.3V-100M(VR)	(1)	394621017	
PCB	C7006	C-CERA C	CK725F1E-104Z1	1	332161040R1	
PCB	C7007	C-CERA C	CK725F1E-104Z1	1	332161040R1	
PCB	C7008	C-CERA C	CK725F1E-104Z1	1	332161040R1	
PCB	C7009	C-CERA C	CK725F1E-104Z1	1	332161040R1	
PCB	C7010	C-CERA C	CK725F1E-104Z1	1	332161040R1	
PCB	C7011	ELECT C	CE04W16V47M(SC)	1	394744707	
PCB	C7011 or	VR C	CE04W16V-47M(VR)	(1)	394644707	
PCB	C7012	ELECT C	CE04W16V47M(SC)	1	394744707	
PCB	C7012 or	VR C	CE04W16V-47M(VR)	(1)	394644707	
PCB	C7015	ELECT C	CE04W16V47M(SC)	1	394744707	
PCB	C7015 or	VR C	CE04W16V-47M(VR)	(1)	394644707	
PCB	C7020	C-CERA C	CK725F1E-104Z1	1	332161040R1	
PCB	C7021	C-CERA C	CK725F1E-104Z1	1	332161040R1	
PCB	C7301	C-CERA C	CK725F1E-104Z1	1	332161040R1	<520>
PCB	C7302	C-CERA C	CK725F1E-104Z1	1	332161040R1	<520>
PCB	C7303	C-CERA C	CK725F1E-104Z1	1	332161040R1	<520>
PCB	C7304	C-CERA C	CK725F1E-104Z1	1	332161040R1	<520>
PCB	C7305	C-CERA C	CK725F1E-104Z1	1	332161040R1	<520>
PCB	C7306	C-CERA C	CK725F1E-104Z1	1	332161040R1	<520>
PCB	C7307	ELECT C	CE04W6.3V100M(SC)	1	394721017	<520>
PCB	C7307 or	VR C	CE04W6.3V-100M(VR)	(1)	394621017	<520>
PCB	C7501	C-CERA C	CK725F1E-104Z1	1	332161040R1	
PCB	C7502	ELECT C	CE04W50V-33M	1	355783309	
PCB	C7503	C-CERA C	CK725F1E-104Z1	1	332161040R1	
PCB	C7504	C-CERA C	CK725F1H-473Z1	1	332154730R1	
PCB	C7505	C-CERA C	CK725F1H-473Z1	1	332154730R1	
PCB	C7506	C-CERA C	CK725F1E-104Z1	1	332161040R1	
PCB	C7507	C-CERA C	CK725F1E-104Z1	1	332161040R1	
PCB	C7508	C-CERA C	CC725CH1E-102J1	1	342111024R1	
PCB	C7509	C-CERA C	CC725CH1E-102J1	1	342111024R1	
PCB	C7510	C-CERA C	CC725CH1E-102J1	1	342111024R1	
PCB	C7511	C-CERA C	CC725CH1E-102J1	1	342111024R1	
PCB	C7513	C-CERA C	CK725F1E-104Z1	1	332161040R1	
PCB	C7514	ELECT C	CE04W6.3V-100M(S)	1	353721019	
PCB	C7515	C-CERA C	CK725F1E-104Z1	1	332161040R1	
PCB	C7516	C-CERA C	CK725F1E-104Z1	1	332161040R1	
PCB	C7517	C-CERA C	CC725CH1E-102J1	1	342111024R1	
PCB	C7518	C-CERA C	CC725CH1E-102J1	1	342111024R1	
PCB	C7519	C-CERA C	CC725CH1E-102J1	1	342111024R1	
PCB	C7520	C-CERA C	CC725CH1E-102J1	1	342111024R1	
PCB	C7521	ELECT C	CE04W6.3V-220M	1	355722219	
PCB	C7522	C-CERA C	CC725CH1H-101J1	1	342101014R1	
PCB	C7523	C-CERA C	CC725CH1E-102J1	1	342111024R1	
PCB	C9501	TF C	ECQ-V50V-104J	1	374721044	
PCB	C9503	TF C	ECQ-V50V-104J	1	374721044	
PCB	C9505	ELECT C	CE04W35V2200M(SC)	1	394762227S	

PCB	C9505 or	VR C	CE04W35V-2200M(VR)	(1)	394662227S	
PCB	C9506	ELECT C	CE04W35V470M(SC)	1	394764717	
PCB	C9506 or	VR C	CE04W35V-470M(VR)	(1)	394664717	
PCB	C9507	ELECT C	CE04W35V220M(SC)	1	394762217	
PCB	C9507 or	VR C	CE04W35V-220M(VR)	(1)	394662217	
PCB	C9508	ELECT C	CE04W16V4700M(SC)	1	394744727S	
PCB	C9508 or	VR C	CE04W16V-4700M(VR)	(1)	394644727S	
PCB	C9510	VR C	CE04W63V-220M(VR)	1	394672217	
PCB	C9511	C-CERA C	CK725F1H-223Z1	1	332152230R1	
PCB	C9512	C-CERA C	CK725F1H-223Z1	1	332152230R1	
PCB	C9513	TF C	ECQ-V50V-104J	1	374721044	
PCB	C9514	TF C	ECQ-V50V-104J	1	374721044	
PCB	C9515	TF C	ECQ-V50V-104J	1	374721044	
PCB	C9516	TF C	ECQ-V50V-104J	1	374721044	
PCB	R102	C-CARBON R	RN72K1J-223JE	1	435032234R1	
PCB	R103	C-CARBON R	RN72K1J-223JE	1	435032234R1	
PCB	R104	C-CARBON R	RN72K1J-104JE	1	435031044R1	
PCB	R109	METAL O R	RS1/2WBJ-330	1	443523314	
PCB	R181	C-CARBON R	RN72K1J-102JE	1	435031024R1	<502E>
PCB	R182	C-CARBON R	RN72K1J-102JE	1	435031024R1	<502E>
PCB	R183	C-CARBON R	RN72K1J-102JE	1	435031024R1	<502E>
PCB	R184	C-CARBON R	RN72K1J-473JE	1	435034734R1	<502E>
PCB	R185	C-CARBON R	RN72K1J-473JE	1	435034734R1	<502>,<8250>,<520>
PCB	R186	C-CARBON R	RN72K1J-473JE	1	435034734R1	<502>,<8250>,<520>
PCB	R187	C-CARBON R	RN72K1J-473JE	1	435034734R1	<502>,<8250>,<520>
PCB	R251	C-CARBON R	RN72K1J-750JE	1	435037504R1	
PCB	R252	C-CARBON R	RN72K1J-750JE	1	435037504R1	
PCB	R253	C-CARBON R	RN72K1J-750JE	1	435037504R1	
PCB	R261	C-CARBON R	RN72K1J-331JE	1	435033314R1	
PCB	R262	C-CARBON R	RN72K1J-331JE	1	435033314R1	
PCB	R300	C-CARBON R	RN72K1J-331JE	1	435033314R1	
PCB	R301	C-CARBON R	RN72K1J-331JE	1	435033314R1	
PCB	R302	C-CARBON R	RN72K1J-331JE	1	435033314R1	
PCB	R303	C-CARBON R	RN72K1J-331JE	1	435033314R1	
PCB	R304	C-CARBON R	RN72K1J-331JE	1	435033314R1	
PCB	R305	C-CARBON R	RN72K1J-331JE	1	435033314R1	
PCB	R308	C-CARBON R	RN72K1J-000JE	1	435030004R1	
PCB	R309	C-CARBON R	RN72K1J-000JE	1	435030004R1	
PCB	R310	C-CARBON R	RN72K1J-331JE	1	435033314R1	
PCB	R311	C-CARBON R	RN72K1J-331JE	1	435033314R1	
PCB	R312	C-CARBON R	RN72K1J-331JE	1	435033314R1	
PCB	R313	C-CARBON R	RN72K1J-331JE	1	435033314R1	
PCB	R314	C-CARBON R	RN72K1J-331JE	1	435033314R1	
PCB	R315	C-CARBON R	RN72K1J-331JE	1	435033314R1	
PCB	R316	C-CARBON R	RN72K1J-331JE	1	435033314R1	
PCB	R317	C-CARBON R	RN72K1J-331JE	1	435033314R1	
PCB	R318	C-CARBON R	RN72K1J-331JE	1	435033314R1	
PCB	R319	C-CARBON R	RN72K1J-331JE	1	435033314R1	
PCB	R320	C-CARBON R	RN72K1J-331JE	1	435033314R1	
PCB	R321	C-CARBON R	RN72K1J-331JE	1	435033314R1	
PCB	R322	C-CARBON R	RN72K1J-473JE	1	435034734R1	
PCB	R323	C-CARBON R	RN72K1J-473JE	1	435034734R1	
PCB	R324	C-CARBON R	RN72K1J-474JE	1	435034744R1	
PCB	R325	C-CARBON R	RN72K1J-474JE	1	435034744R1	
PCB	R326	C-CARBON R	RN72K1J-473JE	1	435034734R1	
PCB	R327	C-CARBON R	RN72K1J-473JE	1	435034734R1	
PCB	R328	C-CARBON R	RN72K1J-473JE	1	435034734R1	
PCB	R329	C-CARBON R	RN72K1J-473JE	1	435034734R1	
PCB	R330	C-CARBON R	RN72K1J-471JE	1	435034714R1	
PCB	R331	C-CARBON R	RN72K1J-471JE	1	435034714R1	
PCB	R332	C-CARBON R	RN72K1J-473JE	1	435034734R1	
PCB	R333	C-CARBON R	RN72K1J-473JE	1	435034734R1	
PCB	R334	C-CARBON R	RN72K1J-474JE	1	435034744R1	
PCB	R335	C-CARBON R	RN72K1J-474JE	1	435034744R1	
PCB	R336	C-CARBON R	RN72K1J-473JE	1	435034734R1	
PCB	R337	C-CARBON R	RN72K1J-473JE	1	435034734R1	
PCB	R338	C-CARBON R	RN72K1J-473JE	1	435034734R1	
PCB	R339	C-CARBON R	RN72K1J-473JE	1	435034734R1	
PCB	R340	C-CARBON R	RN72K1J-473JE	1	435034734R1	
PCB	R341	C-CARBON R	RN72K1J-473JE	1	435034734R1	
PCB	R342	C-CARBON R	RN72K1J-473JE	1	435034734R1	
PCB	R343	C-CARBON R	RN72K1J-473JE	1	435034734R1	
PCB	R345	C-CARBON R	RN72K1J-473JE	1	435034734R1	

PCB	R346	C-CARBON R	RN72K1J-473JE	1	435034734R1
PCB	R347	C-CARBON R	RN72K1J-103JE	1	435031034R1
PCB	R348	C-CARBON R	RN72K1J-103JE	1	435031034R1
PCB	R351	C-CARBON R	RN72K1J-000JE	1	435030004R1
PCB	R352	C-CARBON R	RN72K1J-000JE	1	435030004R1
PCB	R353	C-CARBON R	RN72K1J-472JE	1	435034724R1
PCB	R354	C-CARBON R	RN72K1J-472JE	1	435034724R1
PCB	R355	C-CARBON R	RN72K1J-103JE	1	435031034R1
PCB	R356	C-CARBON R	RN72K1J-103JE	1	435031034R1
PCB	R357	C-CARBON R	RN72K1J-000JE	1	435030004R1
PCB	R358	C-CARBON R	RN72K1J-000JE	1	435030004R1
PCB	R359	C-CARBON R	RN72K1J-471JE	1	435034714R1
PCB	R360	C-CARBON R	RN72K1J-471JE	1	435034714R1
PCB	R361	C-CARBON R	RN72K1J-103JE	1	435031034R1
PCB	R362	C-CARBON R	RN72K1J-103JE	1	435031034R1
PCB	R367	C-CARBON R	RN72K1J-102JE	1	435031024R1
PCB	R368	C-CARBON R	RN72K1J-473JE	1	435034734R1
PCB	R369	C-CARBON R	RN72K1J-222JE	1	435032224R1
PCB	R370	C-CARBON R	RN72K1J-562JE	1	435035624R1
PCB	R373	C-CARBON R	RN72K1J-471JE	1	435034714R1
PCB	R374	C-CARBON R	RN72K1J-471JE	1	435034714R1
PCB	R375	C-CARBON R	RN72K1J-471JE	1	435034714R1
PCB	R376	C-CARBON R	RN72K1J-271JE	1	435032714R1
PCB	R377	C-CARBON R	RN72K1J-223JE	1	435032234R1
PCB	R378	C-CARBON R	RN72K1J-223JE	1	435032234R1
PCB	R379	C-CARBON R	RN72K1J-223JE	1	435032234R1
PCB	R380	C-CARBON R	RN72K1J-223JE	1	435032234R1
PCB	R381	C-CARBON R	RN72K1J-223JE	1	435032234R1
PCB	R382	C-CARBON R	RN72K1J-223JE	1	435032234R1
PCB	R383	C-CARBON R	RN72K1J-103JE	1	435031034R1
PCB	R384	C-CARBON R	RN72K1J-224JE	1	435032244R1
PCB	R385	C-CARBON R	RN72K1J-101JE	1	435031014R1
PCB	R386	C-CARBON R	RN72K1J-222JE	1	435032224R1
PCB	R387	C-CARBON R	RN72K1J-222JE	1	435032224R1
PCB	R388	C-CARBON R	RN72K1J-101JE	1	435031014R1
PCB	R389	C-CARBON R	RN72K1J-471JE	1	435034714R1
PCB	R390	C-CARBON R	RN72K1J-223JE	1	435032234R1
PCB	R401	C-CARBON R	RN72K1J-473JE	1	435034734R1
PCB	R402	C-CARBON R	RN72K1J-473JE	1	435034734R1
PCB	R403	C-CARBON R	RN72K1J-473JE	1	435034734R1
PCB	R404	C-CARBON R	RN72K1J-473JE	1	435034734R1
PCB	R405	C-CARBON R	RN72K1J-473JE	1	435034734R1
PCB	R409	C-CARBON R	RN72K1J-474JE	1	435034744R1
PCB	R410	C-CARBON R	RN72K1J-474JE	1	435034744R1
PCB	R700	C-CARBON R	RN72K1J-331JE	1	435033314R1
PCB	R701	C-CARBON R	RN72K1J-272JE	1	435032724R1
PCB	R702	C-CARBON R	RN72K1J-332JE	1	435033324R1
PCB	R703	C-CARBON R	RN72K1J-332JE	1	435033324R1
PCB	R704	C-CARBON R	RN72K1J-221JE	1	435032214R1
PCB	R705	C-CARBON R	RN72K1J-103JE	1	435031034R1
PCB	R706	C-CARBON R	RN72K1J-221JE	1	435032214R1
PCB	R707	C-CARBON R	RN72K1J-103JE	1	435031034R1
PCB	R708	C-CARBON R	RN72K1J-332JE	1	435033324R1
PCB	R709	C-CARBON R	RN72K1J-332JE	1	435033324R1
PCB	R710	C-CARBON R	RN72K1J-221JE	1	435032214R1
PCB	R711	C-CARBON R	RN72K1J-332JE	1	435033324R1
PCB	R712	C-CARBON R	RN72K1J-103JE	1	435031034R1
PCB	R713	C-CARBON R	RN72K1J-332JE	1	435033324R1
PCB	R714	C-CARBON R	RN72K1J-332JE	1	435033324R1
PCB	R715	C-CARBON R	RN72K1J-332JE	1	435033324R1
PCB	R716	C-CARBON R	RN72K1J-221JE	1	435032214R1
PCB	R718	C-CARBON R	RN72K1J-221JE	1	435032214R1
PCB	R717	C-CARBON R	RN72K1J-221JE	1	435032214R1
PCB	R719	C-CARBON R	RN72K1J-332JE	1	435033324R1
PCB	R720	C-CARBON R	RN72K1J-332JE	1	435033324R1
PCB	R721	C-CARBON R	RN72K1J-332JE	1	435033324R1
PCB	R722	C-CARBON R	RN72K1J-103JE	1	435031034R1
PCB	R723	C-CARBON R	RN72K1J-332JE	1	435033324R1
PCB	R724	C-CARBON R	RN72K1J-470JE	1	435034704R1
PCB	R725	C-CARBON R	RN72K1J-470JE	1	435034704R1
PCB	R726	C-CARBON R	RN72K1J-470JE	1	435034704R1
PCB	R727	C-CARBON R	RN72K1J-470JE	1	435034704R1
PCB	R728	C-CARBON R	RN72K1J-470JE	1	435034704R1

PCB	R729	C-CARBON R	RN72K1J-470JE	1	435034704R1
PCB	R730	C-CARBON R	RN72K1J-470JE	1	435034704R1
PCB	R731	C-CARBON R	RN72K1J-470JE	1	435034704R1
PCB	R732	C-CARBON R	RN72K1J-470JE	1	435034704R1
PCB	R733	C-CARBON R	RN72K1J-470JE	1	435034704R1
PCB	R734	C-CARBON R	RN72K1J-470JE	1	435034704R1
PCB	R735	C-CARBON R	RN72K1J-470JE	1	435034704R1
PCB	R736	C-CARBON R	RN72K1J-470JE	1	435034704R1
PCB	R737	C-CARBON R	RN72K1J-470JE	1	435034704R1
PCB	R738	C-CARBON R	RN72K1J-470JE	1	435034704R1
PCB	R739	C-CARBON R	RN72K1J-470JE	1	435034704R1
PCB	R740	C-CARBON R	RN72K1J-470JE	1	435034704R1
PCB	R741	C-CARBON R	RN72K1J-470JE	1	435034704R1
PCB	R742	C-CARBON R	RN72K1J-470JE	1	435034704R1
PCB	R743	C-CARBON R	RN72K1J-470JE	1	435034704R1
PCB	R744	C-CARBON R	RN72K1J-470JE	1	435034704R1
PCB	R745	C-CARBON R	RN72K1J-470JE	1	435034704R1
PCB	R746	C-CARBON R	RN72K1J-221JE	1	435032214R1
PCB	R747	C-CARBON R	RN72K1J-221JE	1	435032214R1
PCB	R748	C-CARBON R	RN72K1J-221JE	1	435032214R1
PCB	R749	C-CARBON R	RN72K1J-221JE	1	435032214R1
PCB	R750	C-CARBON R	RN72K1J-332JE	1	435033324R1
PCB	R751	C-CARBON R	RN72K1J-221JE	1	435032214R1
PCB	R762	C-CARBON R	RN72K1J-220JE	1	435032204R1
PCB	R763	C-CARBON R	RN72K1J-220JE	1	435032204R1
PCB	R781	C-CARBON R	RN72K1J-105JE	1	435031054R1
PCB	R800	C-CARBON R	RN72K1J-560JE	1	435035604R1
PCB	R801	C-CARBON R	RN72K1J-560JE	1	435035604R1
PCB	R802	C-CARBON R	RN72K1J-560JE	1	435035604R1
PCB	R803	C-CARBON R	RN72K1J-102JE	1	435031024R1
PCB	R804	C-CARBON R	RN72K1J-560JE	1	435035604R1
PCB	R805	C-CARBON R	RN72K1J-102JE	1	435031024R1
PCB	R806	C-CARBON R	RN72K1J-102JE	1	435031024R1
PCB	R807	C-CARBON R	RN72K1J-560JE	1	435035604R1
PCB	R808	C-CARBON R	RN72K1J-102JE	1	435031024R1
PCB	R809	C-CARBON R	RN72K1J-047JE	1	435030474R1
PCB	R810	C-CARBON R	RN72K1J-123JE	1	435031234R1
PCB	R811	C-CARBON R	RN72K1J-331JE	1	435033314R1
PCB	R812	C-CARBON R	RN72K1J-331JE	1	435033314R1
PCB	R813	C-CARBON R	RN72K1J-331JE	1	435033314R1
PCB	R814	C-CARBON R	RN72K1J-331JE	1	435033314R1
PCB	R816	C-CARBON R	RN72K1J-560JE	1	435035604R1
PCB	R817	C-CARBON R	RN72K1J-560JE	1	435035604R1
PCB	R818	C-CARBON R	RN72K1J-331JE	1	435033314R1
PCB	R819	C-CARBON R	RN72K1J-560JE	1	435035604R1
PCB	R820	C-CARBON R	RN72K1J-561JE	1	435035614R1
PCB	R821	C-CARBON R	RN72K1J-560JE	1	435035604R1
PCB	R822	C-CARBON R	RN72K1J-560JE	1	435035604R1
PCB	R823	C-CARBON R	RN72K1J-560JE	1	435035604R1
PCB	R824	C-CARBON R	RN72K1J-102JE	1	435031024R1
PCB	R825	C-CARBON R	RN72K1J-560JE	1	435035604R1
PCB	R826	C-CARBON R	RN72K1J-560JE	1	435035604R1
PCB	R828	C-CARBON R	RN72K1J-222JE	1	435032224R1
PCB	R829	C-CARBON R	RN72K1J-102JE	1	435031024R1
PCB	R831	C-CARBON R	RN72K1J-222JE	1	435032224R1
PCB	R832	C-CARBON R	RN72K1J-222JE	1	435032224R1
PCB	R833	C-CARBON R	RN72K1J-472JE	1	435034724R1
PCB	R834	C-CARBON R	RN72K1J-472JE	1	435034724R1
PCB	R835	C-CARBON R	RN72K1J-222JE	1	435032224R1
PCB	R836	C-CARBON R	RN72K1J-222JE	1	435032224R1
PCB	R837	C-CARBON R	RN72K1J-472JE	1	435034724R1
PCB	R838	C-CARBON R	RN72K1J-472JE	1	435034724R1
PCB	R839	C-CARBON R	RN72K1J-222JE	1	435032224R1
PCB	R840	C-CARBON R	RN72K1J-222JE	1	435032224R1
PCB	R841	C-CARBON R	RN72K1J-472JE	1	435034724R1
PCB	R842	C-CARBON R	RN72K1J-472JE	1	435034724R1
PCB	R843	C-CARBON R	RN72K1J-222JE	1	435032224R1
PCB	R844	C-CARBON R	RN72K1J-222JE	1	435032224R1
PCB	R845	C-CARBON R	RN72K1J-472JE	1	435034724R1
PCB	R848	C-CARBON R	RN72K1J-102JE	1	435031024R1
PCB	R849	C-CARBON R	RN72K1J-560JE	1	435035604R1
PCB	R852	C-CARBON R	RN72K1J-153JE	1	435031534R1
PCB	R853	C-CARBON R	RN72K1J-153JE	1	435031534R1

PCB	R854	C-CARBON R	RN72K1J-104JE	1	435031044R1	
PCB	R855	C-CARBON R	RN72K1J-104JE	1	435031044R1	
PCB	R862	C-CARBON R	RN72K1J-472JE	1	435034724R1	
PCB	R865	C-CARBON R	RN72K1J-472JE	1	435034724R1	
PCB	R866	C-CARBON R	RN72K1J-472JE	1	435034724R1	
PCB	R869	C-CARBON R	RN72K1J-472JE	1	435034724R1	
PCB	R870	C-CARBON R	RN72K1J-472JE	1	435034724R1	
PCB	R873	C-CARBON R	RN72K1J-472JE	1	435034724R1	
PCB	R874	C-CARBON R	RN72K1J-472JE	1	435034724R1	
PCB	R877	C-CARBON R	RN72K1J-472JE	1	435034724R1	
PCB	R879	C-CARBON R	RN72K1J-222JE	1	435032224R1	
PCB	R880	C-CARBON R	RN72K1J-222JE	1	435032224R1	
PCB	R883	C-CARBON R	RN72K1J-222JE	1	435032224R1	
PCB	R884	C-CARBON R	RN72K1J-222JE	1	435032224R1	
PCB	R887	C-CARBON R	RN72K1J-222JE	1	435032224R1	
PCB	R888	C-CARBON R	RN72K1J-222JE	1	435032224R1	
PCB	R891	C-CARBON R	RN72K1J-222JE	1	435032224R1	
PCB	R999	C-CARBON R	RN72K1J-000JE	1	435030004R1	
PCB	R892	C-CARBON R	RN72K1J-222JE	1	435032224R1	
PCB	R6402	METAL O R	RS1/2WBJ-10	1	442521004F	
PCB	R6403	METAL O R	RS2WBJ-150	1	442721514F	
PCB	R6405	C-CARBON R	RN72K1J-473JE	1	435034734R1	<502 PA,PT,GQ, GR,WT>
PCB	R6405	C-CARBON R	RN72K1J-473JE	1	435034734R1	<502E>,<8250>
PCB	R6406	C-CARBON R	RN72K1J-103JE	1	435031034R1	<502 PA,PT,GQ, GR,WT>
PCB	R6406	C-CARBON R	RN72K1J-103JE	1	435031034R1	<502E>,<8250>
PCB	R6407	METAL R	RNU1WCJ-3.3	1	452630334F	<502 DD, DC>,<520>
PCB	R6408	METAL R	RNU1WCJ-3.3	1	452630334F	<502 PA,PT,GQ, GR,WT>
PCB	R6408	METAL R	RNU1WCJ-3.3	1	452630334F	<502E>,<8250>
PCB	R6411	METAL R	RNU1WCJ-1	1	452630104F	
PCB	R6421	C-CARBON R	RN72K1J-047JE	1	435030474R1	
PCB	R6422	C-CARBON R	RN72K1J-047JE	1	435030474R1	
PCB	R7000	C-CARBON R	RN72K1J-101JE	1	435031014R1	
PCB	R7001	C-CARBON R	RN72K1J-222JE	1	435032224R1	
PCB	R7002	C-CARBON R	RN72K1J-222JE	1	435032224R1	
PCB	R7003	C-CARBON R	RN72K1J-000JE	1	435030004R1	<502 DD,DC>,<520>
PCB	R7003	C-CARBON R	RN72K1J-103JE	1	435031034R1	<502 PA,GK,GQ,GR,PT,WT>
PCB	R7003	C-CARBON R	RN72K1J-103JE	1	435031034R1	<502E>,<8250>
PCB	R7004	C-CARBON R	RN72K1J-103JE	1	435031034R1	<502WT>
PCB	R7004	C-CARBON R	RN72K1J-333JE	1	435033334R1	<502 PA,GK,GQ,GR,PT>
PCB	R7004	C-CARBON R	RN72K1J-333JE	1	435033334R1	<8250>
PCB	R7004	C-CARBON R	RN72K1J-563JE	1	435035634R1	<502E>
PCB	R7005	C-CARBON R	RN72K1J-102JE	1	435031024R1	
PCB	R7008	C-CARBON R	RN72K1J-221JE	1	435032214R1	
PCB	R7009	C-CARBON R	RN72K1J-221JE	1	435032214R1	
PCB	R7010	C-CARBON R	RN72K1J-221JE	1	435032214R1	
PCB	R7014	C-CARBON R	RN72K1J-820JE	1	435038204R1	
PCB	R7015	C-CARBON R	RN72K1J-820JE	1	435038204R1	
PCB	R7016	C-CARBON R	RN72K1J-820JE	1	435038204R1	
PCB	R7017	C-CARBON R	RN72K1J-820JE	1	435038204R1	
PCB	R7018	C-CARBON R	RN72K1J-820JE	1	435038204R1	
PCB	R7019	C-CARBON R	RN72K1J-221JE	1	435032214R1	
PCB	R7020	C-CARBON R	RN72K1J-221JE	1	435032214R1	
PCB	R7021	C-CARBON R	RN72K1J-222JE	1	435032224R1	
PCB	R7022	C-CARBON R	RN72K1J-221JE	1	435032214R1	
PCB	R7023	C-CARBON R	RN72K1J-221JE	1	435032214R1	
PCB	R7024	C-CARBON R	RN72K1J-221JE	1	435032214R1	
PCB	R7025	C-CARBON R	RN72K1J-221JE	1	435032214R1	
PCB	R7026	C-CARBON R	RN72K1J-221JE	1	435032214R1	
PCB	R7027	C-CARBON R	RN72K1J-221JE	1	435032214R1	
PCB	R7028	C-CARBON R	RN72K1J-221JE	1	435032214R1	
PCB	R7029	C-CARBON R	RN72K1J-221JE	1	435032214R1	
PCB	R7030	C-CARBON R	RN72K1J-221JE	1	435032214R1	
PCB	R7031	C-CARBON R	RN72K1J-221JE	1	435032214R1	
PCB	R7032	C-CARBON R	RN72K1J-221JE	1	435032214R1	
PCB	R7033	C-CARBON R	RN72K1J-473JE	1	435034734R1	
PCB	R7034	C-CARBON R	RN72K1J-471JE	1	435034714R1	
PCB	R7035	C-CARBON R	RN72K1J-221JE	1	435032214R1	
PCB	R7036	C-CARBON R	RN72K1J-221JE	1	435032214R1	
PCB	R7037	C-CARBON R	RN72K1J-221JE	1	435032214R1	
PCB	R7038	C-CARBON R	RN72K1J-222JE	1	435032224R1	
PCB	R7039	C-CARBON R	RN72K1J-222JE	1	435032224R1	
PCB	R7040	C-CARBON R	RN72K1J-221JE	1	435032214R1	
PCB	R7043	C-CARBON R	RN72K1J-221JE	1	435032214R1	

PCB	R7044	C-CARBON R	RN72K1J-102JE	1	435031024R1	
PCB	R7045	C-CARBON R	RN72K1J-102JE	1	435031024R1	
PCB	R7046	C-CARBON R	RN72K1J-102JE	1	435031024R1	
PCB	R7047	C-CARBON R	RN72K1J-221JE	1	435032214R1	
PCB	R7048	C-CARBON R	RN72K1J-221JE	1	435032214R1	
PCB	R7049	C-CARBON R	RN72K1J-102JE	1	435031024R1	
PCB	R7050	C-CARBON R	RN72K1J-102JE	1	435031024R1	
PCB	R7051	C-CARBON R	RN72K1J-102JE	1	435031024R1	
PCB	R7052	C-CARBON R	RN72K1J-102JE	1	435031024R1	
PCB	R7053	C-CARBON R	RN72K1J-221JE	1	435032214R1	
PCB	R7060	C-CARBON R	RN72K1J-473JE	1	435034734R1	
PCB	R7061	C-CARBON R	RN72K1J-224JE	1	435032244R1	
PCB	R7062	C-CARBON R	RN72K1J-102JE	1	435031024R1	
PCB	R7063	C-CARBON R	RN72K1J-102JE	1	435031024R1	
PCB	R7064	C-CARBON R	RN72K1J-102JE	1	435031024R1	
PCB	R7065	C-CARBON R	RN72K1J-102JE	1	435031024R1	
PCB	R7066	C-CARBON R	RN72K1J-102JE	1	435031024R1	
PCB	R7067	C-CARBON R	RN72K1J-221JE	1	435032214R1	
PCB	R7068	C-CARBON R	RN72K1J-221JE	1	435032214R1	
PCB	R7069	C-CARBON R	RN72K1J-221JE	1	435032214R1	
PCB	R7070	C-CARBON R	RN72K1J-221JE	1	435032214R1	
PCB	R7071	C-CARBON R	RN72K1J-472JE	1	435034724R1	
PCB	R7072	C-CARBON R	RN72K1J-221JE	1	435032214R1	
PCB	R7076	C-CARBON R	RN72K1J-102JE	1	435031024R1	
PCB	R7077	C-CARBON R	RN72K1J-102JE	1	435031024R1	
PCB	R7078	C-CARBON R	RN72K1J-000JE	1	435030004R1	<502 DD,DC>,<520>
PCB	R7078	C-CARBON R	RN72K1J-333JE	1	435033334R1	<502 PA,GK,GQ,GR,PT,WT>
PCB	R7078	C-CARBON R	RN72K1J-333JE	1	435033334R1	<502E>,<8250>
PCB	R7079	C-CARBON R	RN72K1J-000JE	1	435030004R1	<502>,<502E>,<8250>
PCB	R7079	C-CARBON R	RN72K1J-472JE	1	435034724R1	<520>
PCB	R7080	C-CARBON R	RN72K1J-103JE	1	435031034R1	<502>,<502E>,<8250>
PCB	R7080	C-CARBON R	RN72K1J-472JE	1	435034724R1	<520>
PCB	R7081	C-CARBON R	RN72K1J-221JE	1	435032214R1	
PCB	R7082	C-CARBON R	RN72K1J-221JE	1	435032214R1	
PCB	R7083	C-CARBON R	RN72K1J-221JE	1	435032214R1	
PCB	R7084	C-CARBON R	RN72K1J-221JE	1	435032214R1	
PCB	R7085	C-CARBON R	RN72K1J-221JE	1	435032214R1	
PCB	R7120	C-CARBON R	RN72K1J-102JE	1	435031024R1	
PCB	R7134	C-CARBON R	RN72K1J-102JE	1	435031024R1	
PCB	R7138	C-CARBON R	RN72K1J-223JE	1	435032234R1	
PCB	R7178	C-CARBON R	RN72K1J-563JE	1	435035634R1	<502 PA,PT,GK,GQ,GR,WT>
PCB	R7178	C-CARBON R	RN72K1J-563JE	1	435035634R1	<502E>,<8250>
PCB	R7179	C-CARBON R	RN72K1J-333JE	1	435033334R1	<520>
PCB	R7180	C-CARBON R	RN72K1J-103JE	1	435031034R1	<502 DD,DC>
PCB	R7180	C-CARBON R	RN72K1J-103JE	1	435031034R1	<502 PA,PT,GK,GQ,WT>
PCB	R7178	C-CARBON R	RN72K1J-563JE	1	435035634R1	<502E><8250>
PCB	R7180	C-CARBON R	RN72K1J-333JE	1	435033334R1	<520>
PCB	R7311	C-CARBON R	RN72K1J-000JE	1	435030004R1	<502>,<502E>,<8250>
PCB	R7312	C-CARBON R	RN72K1J-000JE	1	435030004R1	<502>,<502E>,<8250>
PCB	R7313	C-CARBON R	RN72K1J-000JE	1	435030004R1	<502>,<502E>,<8250>
PCB	R7314	C-CARBON R	RN72K1J-000JE	1	435030004R1	<502>,<502E>,<8250>
PCB	R7315	C-CARBON R	RN72K1J-000JE	1	435030004R1	<502>,<502E>,<8250>
PCB	R7316	C-CARBON R	RN72K1J-000JE	1	435030004R1	<502>,<502E>,<8250>
PCB	R7317	C-CARBON R	RN72K1J-000JE	1	435030004R1	<502>,<502E>,<8250>
PCB	R7318	C-CARBON R	RN72K1J-000JE	1	435030004R1	<502>,<502E>,<8250>
PCB	R7319	C-CARBON R	RN72K1J-680JE	1	435036804R1	<520>
PCB	R7501	C-CARBON R	RN72K1J-221JE	1	435032214R1	
PCB	R7502	C-CARBON R	RN72K1J-221JE	1	435032214R1	
PCB	R7503	C-CARBON R	RN72K1J-103JE	1	435031034R1	
PCB	R7504	C-CARBON R	RN72K1J-473JE	1	435034734R1	
PCB	R7505	C-CARBON R	RN72K1J-224JE	1	435032244R1	
PCB	R7506	C-CARBON R	RN72K1J-472JE	1	435034724R1	
PCB	R7507	C-CARBON R	RN72K1J-472JE	1	435034724R1	
PCB	R7508	C-CARBON R	RN72K1J-472JE	1	435034724R1	
PCB	R7509	C-CARBON R	RN72K1J-472JE	1	435034724R1	
PCB	R7510	C-CARBON R	RN72K1J-102JE	1	435031024R1	
PCB	R7511	C-CARBON R	RN72K1J-102JE	1	435031024R1	
PCB	R7512	C-CARBON R	RN72K1J-103JE	1	435031034R1	
PCB	R7513	C-CARBON R	RN72K1J-680JE	1	435036804R1	<502 PA,PT,GK,GQ,GR,WT>
PCB	R7513	C-CARBON R	RN72K1J-680JE	1	435036804R1	<502E>,<8250>
PCB	R7514	C-CARBON R	RN72K1J-472JE	1	435034724R1	<502 PA,PT,GK,GQ,GR,WT>
PCB	R7514	C-CARBON R	RN72K1J-472JE	1	435034724R1	<502E>,<8250>
PCB	R7515	C-CARBON R	RN72K1J-103JE	1	435031034R1	

PCB	R7516	C-CARBON R	RN72K1J-103JE	1	435031034R1	
PCB	R7517	C-CARBON R	RN72K1J-102JE	1	435031024R1	
PCB	R7518	C-CARBON R	RN72K1J-104JE	1	435031044R1	
PCB	R7519	C-CARBON R	RN72K1J-104JE	1	435031044R1	
PCB	R7520	C-CARBON R	RN72K1J-272JE	1	435032724R1	
PCB	R7521	C-CARBON R	RN72K1J-272JE	1	435032724R1	
PCB	R7522	C-CARBON R	RN72K1J-272JE	1	435032724R1	
PCB	R7523	C-CARBON R	RN72K1J-272JE	1	435032724R1	
PCB	R7524	C-CARBON R	RN72K1J-102JE	1	435031024R1	
PCB	R7526	C-CARBON R	RN72K1J-103JE	1	435031034R1	
PCB	R7527	C-CARBON R	RN72K1J-103JE	1	435031034R1	
PCB	R7528	C-CARBON R	RN72K1J-561JE	1	435035614R1	
PCB	R7529	C-CARBON R	RN72K1J-561JE	1	435035614R1	
PCB	R7530	C-CARBON R	RN72K1J-102JE	1	435031024R1	
PCB	R7531	C-CARBON R	RN72K1J-391JE	1	435033914R1	
PCB	R7532	C-CARBON R	RN72K1J-103JE	1	435031034R1	
PCB	R7591	C-CARBON R	RN72K1J-000JE	1	435030004R1	<502 PA,PT,GK,GQ,GR,WT>
PCB	R7591	C-CARBON R	RN72K1J-000JE	1	435030004R1	<502E>,<8250>
PCB	R7592	C-CARBON R	RN72K1J-000JE	1	435030004R1	<502 PA,PT,GK,GQ,GR,WT>
PCB	R7592	C-CARBON R	RN72K1J-000JE	1	435030004R1	<502E>,<8250>
PCB	R7593	C-CARBON R	RN72K1J-000JE	1	435030004R1	<502 PA,PT,GK,GQ,GR,WT>
PCB	R7593	C-CARBON R	RN72K1J-000JE	1	435030004R1	<502E>,<8250>
PCB	R7611	C-CARBON R	RN72K1J-331JE	1	435033314R1	
PCB	R7612	C-CARBON R	RN72K1J-471JE	1	435034714R1	
PCB	R7613	C-CARBON R	RN72K1J-561JE	1	435035614R1	
PCB	R7615	C-CARBON R	RN72K1J-821JE	1	435038214R1	
PCB	R7616	C-CARBON R	RN72K1J-122JE	1	435031224R1	
PCB	R7617	C-CARBON R	RN72K1J-222JE	1	435032224R1	
PCB	R7621	C-CARBON R	RN72K1J-331JE	1	435033314R1	
PCB	R7622	C-CARBON R	RN72K1J-471JE	1	435034714R1	
PCB	R7623	C-CARBON R	RN72K1J-561JE	1	435035614R1	
PCB	R7624	C-CARBON R	RN72K1J-821JE	1	435038214R1	
PCB	R7625	C-CARBON R	RN72K1J-122JE	1	435031224R1	
PCB	R7626	C-CARBON R	RN72K1J-222JE	1	435032224R1	
PCB	R7631	C-CARBON R	RN72K1J-331JE	1	435033314R1	
PCB	R7632	C-CARBON R	RN72K1J-471JE	1	435034714R1	
PCB	R7633	C-CARBON R	RN72K1J-561JE	1	435035614R1	
PCB	R7634	C-CARBON R	RN72K1J-821JE	1	435038214R1	
PCB	R7635	C-CARBON R	RN72K1J-122JE	1	435031224R1	
PCB	R7636	C-CARBON R	RN72K1J-222JE	1	435032224R1	
PCB	R7637	C-CARBON R	RN72K1J-392JE	1	435033924R1	
PCB	R7641	C-CARBON R	RN72K1J-331JE	1	435033314R1	
PCB	R7642	C-CARBON R	RN72K1J-471JE	1	435034714R1	
PCB	R7643	C-CARBON R	RN72K1J-561JE	1	435035614R1	
PCB	R7644	C-CARBON R	RN72K1J-821JE	1	435038214R1	
PCB	R7645	C-CARBON R	RN72K1J-122JE	1	435031224R1	
PCB	R7646	C-CARBON R	RN72K1J-222JE	1	435032224R1	
PCB	R7839	C-CARBON R	RN72K1J-223JE	1	435032234R1	
PCB	R9506	METAL O R	RS1/2WBJ-22	1	443522204	
PCB	R9507	C-CARBON R	RN72K1J-153JE	1	435031534R1	
PCB	R9508	C-CARBON R	RN72K1J-153JE	1	435031534R1	
PCB	R9509	C-CARBON R	RN72K1J-104JE	1	435031044R1	
PCB	E300	RETAINER	KANAGU	1	27141059	
PCB	E301	RETAINER	(S)	1	27141931	
PCB	E7501	RETAINER	KANAGU	1	27141059	
PCB	P101	SOCKET	NSCT-15P2108	1	25052211	
PCB	P101 or	SOCKET	NSCT-15P1811	(1)	25052024	
PCB	P251	PIN JACK	NPJ-7PDB477	1	25045680	
PCB	P253B	SOCKET AS	NSAS-10P0787	1	2009990578UL	
PCB	P261A	PLUG	NPLG-3P117	1	25055133	
PCB	P261B	SOCKET AS	NSAS-6P0675	1	2009990513UL	
PCB	P301	PIN JACK	NPJ-6PDRW386	1	25045571	
PCB	P301 or	JACK	NPJ-6PDBL159	(1)	25045300	
PCB	P301 or	PIN JACK	NPJ-6PDWWWRRR561	(1)	25045779	
PCB	P304	PIN JACK	NPJ-6PDRW386	1	25045571	
PCB	P304 or	JACK	NPJ-6PDBL159	(1)	25045300	
PCB	P304 or	PIN JACK	NPJ-6PDWWWRRR561	(1)	25045779	
PCB	P305	PIN JACK	NPJ-6PWRLGGP493	1	25045697	
PCB	P305 or	PIN JACK	NPJ-6PDWLGREP562	(1)	25045780	
PCB	P306	SOCKET AS	NSAS-26P1207	1	2009990825UL	
PCB	P351	PIN JACK	NPJ-1PDP510	1	25045720	
PCB	P351 or	PIN JACK	NPJ-1PDP555	(1)	25045773	
PCB	P410B	PLUG	NPLG-11P663	1	25055707	

PCB	P411B	PLUG	NPLG-10P662	1	25055706
PCB	P412B	PLUG	NPLG-8P660	1	25055704
PCB	P801	PLUG	NPLG-15P667	1	25055711
PCB	P6401	BUS BAR	BBL75	1	27141774
PCB	P6403	RETAINER	KANAGU	1	27141059
PCB	P7501	ST JACK	YKB21-5005	1	25045724
PCB	P7501 or	ST JACK	MSJ-064-05A SR	(1)	25045783
PCB	P7502A	SOCKET	NSCT-10P1679	1	25051892
PCB	P7502Aor	SOCKET	NSCT-10P2374	(1)	25052477
PCB	P7502B	SOCKET	NSCT-10P2473	1	25052576R2
PCB	P7503A	SOCKET	NSCT-8P2138	1	25052241
PCB	P7503Aor	SOCKET	NSCT-8P1639	(1)	25051852
PCB	P7503Aor	SOCKET	NSCT-8P1841	(1)	25052054
PCB	S7501	R ENCODE	EC12E2425	1	25065655
PCB	S7611	PUSH SW	NPS-111-S681	1	25035718
PCB	S7611 or	PUSH SW	NPS-111-S677	(1)	25035714
PCB	S7612	PUSH SW	NPS-111-S681	1	25035718
PCB	S7612 or	PUSH SW	NPS-111-S677	(1)	25035714
PCB	S7613	PUSH SW	NPS-111-S681	1	25035718
PCB	S7613 or	PUSH SW	NPS-111-S677	(1)	25035714
PCB	S7614	PUSH SW	NPS-111-S681	1	25035718
PCB	S7614 or	PUSH SW	NPS-111-S677	(1)	25035714
PCB	S7615	PUSH SW	NPS-111-S681	1	25035718
PCB	S7615 or	PUSH SW	NPS-111-S677	(1)	25035714
PCB	S7616	PUSH SW	NPS-111-S681	1	25035718
PCB	S7616 or	PUSH SW	NPS-111-S677	(1)	25035714
PCB	S7617	PUSH SW	NPS-111-S681	1	25035718
PCB	S7617 or	PUSH SW	NPS-111-S677	(1)	25035714
PCB	S7621	PUSH SW	NPS-111-S681	1	25035718
PCB	S7621 or	PUSH SW	NPS-111-S677	(1)	25035714
PCB	S7622	PUSH SW	NPS-111-S681	1	25035718
PCB	S7622 or	PUSH SW	NPS-111-S677	(1)	25035714
PCB	S7623	PUSH SW	NPS-111-S681	1	25035718
PCB	S7623 or	PUSH SW	NPS-111-S677	(1)	25035714
PCB	S7624	PUSH SW	NPS-111-S681	1	25035718
PCB	S7624 or	PUSH SW	NPS-111-S677	(1)	25035714
PCB	S7625	PUSH SW	NPS-111-S681	1	25035718
PCB	S7625 or	PUSH SW	NPS-111-S677	(1)	25035714
PCB	S7627	PUSH SW	NPS-111-S681	1	25035718
PCB	S7627 or	PUSH SW	NPS-111-S677	(1)	25035714
PCB	S7631	PUSH SW	NPS-111-S681	1	25035718
PCB	S7631 or	PUSH SW	NPS-111-S677	(1)	25035714
PCB	S7632	PUSH SW	NPS-111-S681	1	25035718
PCB	S7632 or	PUSH SW	NPS-111-S677	(1)	25035714
PCB	S7633	PUSH SW	NPS-111-S681	1	25035718
PCB	S7633 or	PUSH SW	NPS-111-S677	(1)	25035714
PCB	S7634	PUSH SW	NPS-111-S681	1	25035718
PCB	S7634 or	PUSH SW	NPS-111-S677	(1)	25035714
PCB	S7635	PUSH SW	NPS-111-S681	1	25035718
PCB	S7635 or	PUSH SW	NPS-111-S677	(1)	25035714
PCB	S7636	PUSH SW	NPS-111-S681	1	25035718
PCB	S7636 or	PUSH SW	NPS-111-S677	(1)	25035714
PCB	S7637	PUSH SW	NPS-111-S681	1	25035718
PCB	S7637 or	PUSH SW	NPS-111-S677	(1)	25035714
PCB	S7638	PUSH SW	NPS-111-S681	1	25035718
PCB	S7638 or	PUSH SW	NPS-111-S677	(1)	25035714
PCB	S7641	PUSH SW	NPS-111-S681	1	25035718
PCB	S7641 or	PUSH SW	NPS-111-S677	(1)	25035714
PCB	S7642	PUSH SW	NPS-111-S681	1	25035718
PCB	S7642 or	PUSH SW	NPS-111-S677	(1)	25035714
PCB	S7643	PUSH SW	NPS-111-S681	1	25035718
PCB	S7643 or	PUSH SW	NPS-111-S677	(1)	25035714
PCB	S7644	PUSH SW	NPS-111-S681	1	25035718
PCB	S7644 or	PUSH SW	NPS-111-S677	(1)	25035714
PCB	S7645	PUSH SW	NPS-111-S681	1	25035718
PCB	S7645 or	PUSH SW	NPS-111-S677	(1)	25035714
PCB	S7646	PUSH SW	NPS-111-S681	1	25035718
PCB	S7646 or	PUSH SW	NPS-111-S677	(1)	25035714
PCB	S7647	PUSH SW	NPS-111-S681	1	25035718
PCB	S7647 or	PUSH SW	NPS-111-S677	(1)	25035714
PCB	JL7501A	WIRE HOL	NSCT-3P894	1	25051107
PCB	JL7501B	WIRE HOL	NSCT-3P894	1	25051107
PCB	JL7502A	WIRE HOL	NSCT-5P896	1	25051109

PCB	JL7502B	WIRE HOL	NSCT-5P896	1	25051109

U06 DRIVER AMPLIFIER PC BOARD (NAAF-8235-1A/1B/1D)
U07 COMPONENT VIDEO TERMINAL PC BOARD (NAVD-8236-1A/1B/1D)
U09 REGULATOR PC BOARD (NAETC-8238-1A/1B/1D)
U10 TERMINAL PC BOARD (NAETC-8239-1A/1B/1D)
U11 SPEAKER TERMINAL PC BOARD (NAETC-8240-1D)
U12 HOLDER PC BOARD (NAETC-8241-1A/1B/1D)
U14 TERMINAL PC BOARD (NAETC-8243-1A/1B/1D)
U15 SPEAKER TERMINAL PC BOARD (NAETC-8244-1A/1B/1D)

<Notes> Parts are indicated collectively, without dividing for above-mentioned each substrate.

NOTE : THE COMPONENTS IDENTIFIED BY THE MARK
! ARE CRITICAL FOR RISK OF FIRE AND
ELECTRIC SHOCK. REPLACE ONLY WITH PART
NUMBER SPECIFIED.

<Notes>

<**502**>:TX-SR502
<**502E**>:TX-SR502E(European model)
<**8250**>:TX-SR8250(Chinese model)
<**520**>:HT-R520(American model & Canadian model)

<**DC**> : Canadian model
<**DD**> : American model
<**GK**> : Korean model
<**GQ**> : Hong kong model
<**GR**> : Chinese model
<**PA**> : Australian model
<**PT**> : Asian model (230-240V)
<**WT**> : World wide model

	REF. NO.	NAME	DESCRIPTION	Q'TY	PART NO	REMARKS
PCB	Q241	TR	KTC3199-GR	1	2215864	
PCB	Q241 or	TR	2SC1740S-R	(1)	2213284	
PCB	Q241 or	TR	2SC1740S-S	(1)	2213285	
PCB	Q241 or	TR	2SC2458-GR	(1)	2212115	
PCB	Q5000	TR	KTC3200-BL	1	2215896	
PCB	Q5000 or	TR	2SC1775A-E	(1)	2210755	
PCB	Q5000 or	TR	2SC1775A-F	(1)	2210756	
PCB	Q5000 or	TR	2SC1845-E	(1)	2211733	
PCB	Q5001	TR	KTC3200-BL	1	2215896	
PCB	Q5001 or	TR	2SC1775A-E	(1)	2210755	
PCB	Q5001 or	TR	2SC1775A-F	(1)	2210756	
PCB	Q5001 or	TR	2SC1845-E	(1)	2211733	
PCB	Q5002	TR	KTC3200-BL	1	2215896	
PCB	Q5002 or	TR	2SC1775A-E	(1)	2210755	
PCB	Q5002 or	TR	2SC1775A-F	(1)	2210756	
PCB	Q5002 or	TR	2SC1845-E	(1)	2211733	
PCB	Q5003	TR	KTC3200-BL	1	2215896	
PCB	Q5003 or	TR	2SC1775A-E	(1)	2210755	
PCB	Q5003 or	TR	2SC1775A-F	(1)	2210756	
PCB	Q5003 or	TR	2SC1845-E	(1)	2211733	
PCB	Q5004	TR	KTC3200-BL	1	2215896	
PCB	Q5004 or	TR	2SC1775A-E	(1)	2210755	
PCB	Q5004 or	TR	2SC1775A-F	(1)	2210756	
PCB	Q5004 or	TR	2SC1845-E	(1)	2211733	
PCB	Q5005	TR	KTC3200-BL	1	2215896	
PCB	Q5005 or	TR	2SC1775A-E	(1)	2210755	
PCB	Q5005 or	TR	2SC1775A-F	(1)	2210756	
PCB	Q5005 or	TR	2SC1845-E	(1)	2211733	
PCB	Q5010	TR	KTC3200-BL	1	2215896	
PCB	Q5010 or	TR	2SC1775A-E	(1)	2210755	
PCB	Q5010 or	TR	2SC1775A-F	(1)	2210756	
PCB	Q5010 or	TR	2SC1845-E	(1)	2211733	
PCB	Q5011	TR	KTC3200-BL	1	2215896	
PCB	Q5011 or	TR	2SC1775A-E	(1)	2210755	
PCB	Q5011 or	TR	2SC1775A-F	(1)	2210756	
PCB	Q5011 or	TR	2SC1845-E	(1)	2211733	
PCB	Q5012	TR	KTC3200-BL	1	2215896	
PCB	Q5012 or	TR	2SC1775A-E	(1)	2210755	
PCB	Q5012 or	TR	2SC1775A-F	(1)	2210756	
PCB	Q5012 or	TR	2SC1845-E	(1)	2211733	
PCB	Q5013	TR	KTC3200-BL	1	2215896	
PCB	Q5013 or	TR	2SC1775A-E	(1)	2210755	
PCB	Q5013 or	TR	2SC1775A-F	(1)	2210756	
PCB	Q5013 or	TR	2SC1845-E	(1)	2211733	
PCB	Q5014	TR	KTC3200-BL	1	2215896	
PCB	Q5014 or	TR	2SC1775A-E	(1)	2210755	
PCB	Q5014 or	TR	2SC1775A-F	(1)	2210756	

PCB	Q5014 or	TR	2SC1845-E	(1)	2211733	
PCB	Q5015	TR	KTC3200-BL	1	2215896	
PCB	Q5015 or	TR	2SC1775A-E	(1)	2210755	
PCB	Q5015 or	TR	2SC1775A-F	(1)	2210756	
PCB	Q5015 or	TR	2SC1845-E	(1)	2211733	
PCB	Q5030	TR	KTA1024-Y	1	2215844	<502>,<502E>,<8250>
PCB	Q5030 or	TR	KTA1024-O	(1)	2215843	<502>,<502E>,<8250>
PCB	Q5030 or	TR	2SA949-O	(1)	2211353	<502>,<502E>,<8250>
PCB	Q5030 or	TR	2SA949-Y	(1)	2211354	<502>,<502E>,<8250>
PCB	Q5030	TR	2SA949-Y(ONK)	1	2211359	<520>
PCB	Q5030 or	TR	2SA949-O(ONK)	(1)	2211358	<520>
PCB	Q5031	TR	KTA1024-Y	1	2215844	<502>,<502E>,<8250>
PCB	Q5031 or	TR	KTA1024-O	(1)	2215843	<502>,<502E>,<8250>
PCB	Q5031 or	TR	2SA949-Y	(1)	2211354	<502>,<502E>,<8250>
PCB	Q5031 or	TR	2SA949-O	(1)	2211353	<502>,<502E>,<8250>
PCB	Q5031	TR	2SA949-Y(ONK)	1	2211359	<520>
PCB	Q5031 or	TR	2SA949-O(ONK)	(1)	2211358	<520>
PCB	Q5032	TR	KTA1024-Y	1	2215844	<502>,<502E>,<8250>
PCB	Q5032 or	TR	KTA1024-O	(1)	2215843	<502>,<502E>,<8250>
PCB	Q5032 or	TR	2SA949-O	(1)	2211353	<502>,<502E>,<8250>
PCB	Q5032 or	TR	2SA949-Y	(1)	2211354	<502>,<502E><8250>
PCB	Q5032	TR	2SA949-Y(ONK)	1	2211359	<520>
PCB	Q5032 or	TR	2SA949-O(ONK)	(1)	2211358	<520>
PCB	Q5033	TR	KTA1024-Y	1	2215844	<502>,<502E>,<8250>
PCB	Q5033 or	TR	KTA1024-O	(1)	2215843	<502>,<502E>,<8250>
PCB	Q5033 or	TR	2SA949-Y	(1)	2211354	<502>,<502E>,<8250>
PCB	Q5033 or	TR	2SA949-O	(1)	2211353	<502>,<502E>,<8250>
PCB	Q5033	TR	2SA949-Y(ONK)	1	2211359	<520>
PCB	Q5033 or	TR	2SA949-O(ONK)	(1)	2211358	<520>
PCB	Q5034	TR	KTA1024-Y	1	2215844	<502>,<502E>,<8250>
PCB	Q5034 or	TR	KTA1024-O	(1)	2215843	<502>,<502E>,<8250>
PCB	Q5034 or	TR	2SA949-Y	(1)	2211354	<502>,<502E>,<8250>
PCB	Q5034 or	TR	2SA949-O	(1)	2211353	<502>,<502E>,<8250>
PCB	Q5034	TR	2SA949-Y(ONK)	1	2211359	<520>
PCB	Q5034 or	TR	2SA949-O(ONK)	(1)	2211358	<520>
PCB	Q5035	TR	KTA1024-Y	1	2215844	<502>,<502E>,<8250>
PCB	Q5035 or	TR	KTA1024-O	(1)	2215843	<502>,<502E>,<8250>
PCB	Q5035 or	TR	2SA949-Y	(1)	2211354	<502>,<502E>,<8250>
PCB	Q5035 or	TR	2SA949-O	(1)	2211353	<502>,<502E>,<8250>
PCB	Q5035	TR	2SA949-Y(ONK)	1	2211359	<520>
PCB	Q5035 or	TR	2SA949-O(ONK)	(1)	2211358	<520>
PCB	Q5040	TR	KTC3206-Y	1	2215854	<502>,<502E>,<8250>
PCB	Q5040 or	TR	KTC3206-O	(1)	2215853	<502><502E>,<8250>
PCB	Q5040 or	TR	2SC2229-Y	(1)	2211634	<502>,<502E>,<8250>
PCB	Q5040 or	TR	2SC2229-O	(1)	2211633	<502>,<502E>,<8250>
PCB	Q5040	TR	2SC2229-Y(ONK)	1	2211639	<520>
PCB	Q5040 or	TR	2SC2229-O(ONK)	(1)	2211638	<520>
PCB	Q5041	TR	KTC3206-Y	1	2215854	<502>,<502E>,<8250>
PCB	Q5041 or	TR	KTC3206-O	(1)	2215853	<502>,<502E>,<8250>
PCB	Q5041 or	TR	2SC2229-Y	(1)	2211634	<502>,<502E>,<8250>
PCB	Q5041 or	TR	2SC2229-O	(1)	2211633	<502>,<502E>,<8250>
PCB	Q5041	TR	2SC2229-Y(ONK)	1	2211639	<520>
PCB	Q5041 or	TR	2SC2229-O(ONK)	(1)	2211638	<520>
PCB	Q5042	TR	KTC3206-Y	1	2215854	<502>,<502E>,<8250>
PCB	Q5042 or	TR	KTC3206-O	(1)	2215853	<502>,<502E>,<8250>
PCB	Q5042 or	TR	2SC2229-Y	(1)	2211634	<502>,<502E>,<8250>
PCB	Q5042 or	TR	2SC2229-O	(1)	2211633	<502>,<502E>,<8250>
PCB	Q5042	TR	2SC2229-Y(ONK)	1	2211639	<520>
PCB	Q5042 or	TR	2SC2229-O(ONK)	(1)	2211638	<520>
PCB	Q5043	TR	KTC3206-Y	1	2215854	<502>,<502E>,<8250>
PCB	Q5043 or	TR	KTC3206-O	(1)	2215853	<502>,<502E>,<8250>
PCB	Q5043 or	TR	2SC2229-Y	(1)	2211634	<502>,<502E>,<8250>
PCB	Q5043 or	TR	2SC2229-O	(1)	2211633	<502>,<502E>,<8250>
PCB	Q5043	TR	2SC2229-Y(ONK)	1	2211639	<520>
PCB	Q5043 or	TR	2SC2229-O(ONK)	(1)	2211638	<520>
PCB	Q5044	TR	KTC3206-Y	1	2215854	<502>,<502E>,<8250>
PCB	Q5044 or	TR	KTC3206-O	(1)	2215853	<502>,<,502E>,<8250>
PCB	Q5044 or	TR	2SC2229-Y	(1)	2211634	<502>,<502E>,<8250>
PCB	Q5044 or	TR	2SC2229-O	(1)	2211633	<502>,<502E>,<8250>
PCB	Q5044	TR	2SC2229-Y(ONK)	1	2211639	<520>
PCB	Q5044 or	TR	2SC2229-O(ONK)	(1)	2211638	<520>
PCB	Q5045	TR	KTC3206-Y	1	2215854	<502>,<502E>,<8250>
PCB	Q5045 or	TR	KTC3206-O	(1)	2215853	<502>,<502E>,<8250>

PCB	Q5045 or	TR	2SC2229-Y	(1)	2211634	<502>,<502E>,<8250>
PCB	Q5045 or	TR	2SC2229-O	(1)	2211633	<502>,<502E>,<8250>
PCB	Q5045	TR	2SC2229-Y(ONK)	1	2211639	<520>
PCB	Q5045 or	TR	2SC2229-O(ONK)	(1)	2211638	<520>
PCB	Q5050	TR	KTC3199-GR	1	2215864	<502>,<502E>,<8250>
PCB	Q5050 or	TR	2SC1740S-R	(1)	2213284	<502>,<502E>,<8250>
PCB	Q5050 or	TR	2SC1740S-S	(1)	2213285	<502>,<502E>,<8250>
PCB	Q5050 or	TR	2SC2458-GR	(1)	2212115	<502>,<502E>,<8250>
PCB	Q5050	TR	KTC3200-BL	1	2215896	<520>
PCB	Q5050 or	TR	KTC3200-GR	(1)	2215895	<520>
PCB	Q5050 or	TR	2SC1775A-E	(1)	2210755	<520>
PCB	Q5050 or	TR	2SC1775A-F	(1)	2210756	<520>
PCB	Q5050 or	TR	2SC1845-E	(1)	2211733	<520>
PCB	Q5050 or	TR	2SC1845-F	(1)	2211732	<520>
PCB	Q5051	TR	KTC3199-GR	1	2215864	<502>,<502E>,<8250>
PCB	Q5051 or	TR	2SC1740S-R	(1)	2213284	<502>,<502E>,<8250>
PCB	Q5051 or	TR	2SC1740S-S	(1)	2213285	<502>,<502E>,<8250>
PCB	Q5051 or	TR	2SC2458-GR	(1)	2212115	<502>,<502E>,<8250>
PCB	Q5051	TR	KTC3200-BL	1	2215896	<520>
PCB	Q5051 or	TR	KTC3200-GR	(1)	2215895	<520>
PCB	Q5051 or	TR	2SC1775A-E	(1)	2210755	<520>
PCB	Q5051 or	TR	2SC1775A-F	(1)	2210756	<520>
PCB	Q5051 or	TR	2SC1845-E	(1)	2211733	<520>
PCB	Q5051 or	TR	2SC1845-F	(1)	2211732	<520>
PCB	Q5052	TR	KTC3199-GR	1	2215864	<502>,<502E><8250>
PCB	Q5052 or	TR	2SC1740S-R	(1)	2213284	<502>,<502E>,<8250>
PCB	Q5052 or	TR	2SC1740S-S	(1)	2213285	<502>,<502E>,<8250>
PCB	Q5052 or	TR	2SC2458-GR	(1)	2212115	<502>,<502E>,<8250>
PCB	Q5052	TR	KTC3200-BL	1	2215896	<520>
PCB	Q5052 or	TR	KTC3200-GR	(1)	2215895	<520>
PCB	Q5052 or	TR	2SC1775A-E	(1)	2210755	<520>
PCB	Q5052 or	TR	2SC1775A-F	(1)	2210756	<520>
PCB	Q5052 or	TR	2SC1845-E	(1)	2211733	<520>
PCB	Q5052 or	TR	2SC1845-F	(1)	2211732	<520>
PCB	Q5053	TR	KTC3199-GR	1	2215864	<502>,<502E>,<8250>
PCB	Q5053 or	TR	2SC1740S-R	(1)	2213284	<502>,<502E>,<8250>
PCB	Q5053 or	TR	2SC1740S-S	(1)	2213285	<502>,<502E>,<8250>
PCB	Q5053 or	TR	2SC2458-GR	(1)	2212115	<502>,<502E>,<8250>
PCB	Q5053	TR	KTC3200-BL	1	2215896	<520>
PCB	Q5053 or	TR	KTC3200-GR	(1)	2215895	<520>
PCB	Q5053 or	TR	2SC1775A-E	(1)	2210755	<520>
PCB	Q5053 or	TR	2SC1775A-F	(1)	2210756	<520>
PCB	Q5053 or	TR	2SC1845-E	(1)	2211733	<520>
PCB	Q5053 or	TR	2SC1845-F	(1)	2211732	<520>
PCB	Q5054	TR	KTC3199-GR	1	2215864	<502><502E>,<8250>
PCB	Q5054 or	TR	2SC1740S-R	(1)	2213284	<502>,<502E>,<8250>
PCB	Q5054 or	TR	2SC1740S-S	(1)	2213285	<502>,<502E>,<8250>
PCB	Q5054 or	TR	2SC2458-GR	(1)	2212115	<502>,<502E>,<8250>
PCB	Q5054	TR	KTC3200-BL	1	2215896	<520>
PCB	Q5054 or	TR	KTC3200-GR	(1)	2215895	<520>
PCB	Q5054 or	TR	2SC1775A-E	(1)	2210755	<520>
PCB	Q5054 or	TR	2SC1775A-F	(1)	2210756	<520>
PCB	Q5054 or	TR	2SC1845-E	(1)	2211733	<520>
PCB	Q5054 or	TR	2SC1845-F	(1)	2211732	<520>
PCB	Q5055	TR	KTC3199-GR	1	2215864	<502>,<502E>,<8250>
PCB	Q5055 or	TR	2SC1740S-R	(1)	2213284	<502>,<502E>,<8250>
PCB	Q5055 or	TR	2SC1740S-S	(1)	2213285	<502>,<502E>,<8250>
PCB	Q5055 or	TR	2SC2458-GR	(1)	2212115	<502>,<502E>,<8250>
PCB	Q5055	TR	KTC3200-BL	1	2215896	<520>
PCB	Q5055 or	TR	KTC3200-GR	(1)	2215895	<520>
PCB	Q5055 or	TR	2SC1775A-E	(1)	2210755	<520>
PCB	Q5055 or	TR	2SC1775A-F	(1)	2210756	<520>
PCB	Q5055 or	TR	2SC1845-E	(1)	2211733	<520>
PCB	Q5055 or	TR	2SC1845-F	(1)	2211732	<520>
PCB	Q6931	IC(REGULATOR)	78M56(NJM78M56FA)	1	222780565JRC	
PCB	Q6931 or	IC(REGURATOR)	78057HF(TA78057S)	(1)	222780574TOS	
PCB	D241	DIODE	1SS133	1	223163	
PCB	D241 or	DIODE	1SS270A	(1)	223205	
PCB	D241 or	DIODE	1N4148M	(1)	223273	
PCB	D5000	ZENER D	MTZJ5.6B	1	224470562	
PCB	D5000 or	ZENER D	DZ-5.6BSB	(1)	224850562	
PCB	D5001	ZENER D	MTZJ5.6B	1	224470562	
PCB	D5001 or	ZENER D	DZ-5.6BSB	(1)	224850562	

PCB	D5002	ZENER D	MTZJ5.6B	1	224470562	
PCB	D5002 or	ZENER D	DZ-5.6BSB	(1)	224850562	
PCB	D5003	ZENER D	MTZJ5.6B	1	224470562	
PCB	D5003 or	ZENER D	DZ-5.6BSB	(1)	224850562	
PCB	D5004	ZENER D	MTZJ5.6B	1	224470562	
PCB	D5004 or	ZENER D	DZ-5.6BSB	(1)	224850562	
PCB	D5005	ZENER D	MTZJ5.6B	1	224470562	
PCB	D5005 or	ZENER D	DZ-5.6BSB	(1)	224850562	
PCB	D5800	DIODE	1SS133	1	223163	<502>,<502E>,<8250>
PCB	D5800 or	DIODE	1SS270A	(1)	223205	<502>,<502E>,<8250>
PCB	D5800 or	DIODE	WG713A	(1)	223222	<502>,<502E>,<8250>
PCB	D5800 or	DIODE	1N4148M	(1)	223273	<502>,<502E>,<8250>
PCB	D5801	DIODE	1SS133	1	223163	<502>,<502E>,<8250>
PCB	D5801 or	DIODE	1SS270A	(1)	223205	<502>,<502E>,<8250>
PCB	D5801 or	DIODE	WG713A	(1)	223222	<502>,<502E>,<8250>
PCB	D5801 or	DIODE	1N4148M	(1)	223273	<502>,<502E>,<8250>
PCB	D5804	DIODE	1SS133	1	223163	<502>,<502E>,<8250>
PCB	D5804 or	DIODE	1SS270A	(1)	223205	<502>,<502E>,<8250>
PCB	D5804 or	DIODE	WG713A	(1)	223222	<502>,<502E>,<8250>
PCB	D5804 or	DIODE	1N4148M	(1)	223273	<502>,<502E>,<8250>
PCB	D6800	DIODE	1SS133	1	223163	<502>
PCB	D6800 or	DIODE	1SS270A	(1)	223205	<502>
PCB	D6800 or	DIODE	WG713A	(1)	223222	<502>
PCB	D6800 or	DIODE	1N4148M	(1)	223273	<502>
PCB	D6801	DIODE	1SS133	1	223163	<502>
PCB	D6801 or	DIODE	1SS270A	(1)	223205	<502>
PCB	D6801 or	DIODE	WG713A	(1)	223222	<502>
PCB	D6801 or	DIODE	1N4148M	(1)	223273	<502>
PCB	D6804	DIODE	1SS133	1	223163	<502>
PCB	D6804 or	DIODE	1SS270A	(1)	223205	<502>
PCB	D6804 or	DIODE	WG713A	(1)	223222	<502>
PCB	D6804 or	DIODE	1N4148M	(1)	223273	<502>
PCB	D6932	DIODE	RL1N4003	1	22380260	
PCB	D6932 or	DIODE	GP104003E	(1)	22380035	
PCB	D6933	DIODE	RL1N4003	1	22380260	
PCB	D6933 or	DIODE	GP104003E	(1)	22380035	
PCB	L5800	S COIL	S-1.3C	1	231176S	<502>,<502E>,<8250>
PCB	L5801	S COIL	S-1.3C	1	231176S	<502>,<502E>,<8250>
PCB	L5802	S COIL	S-1.3C	1	231176S	<502>,<502E>,<8250>
PCB	L5803	S COIL	S-1.3C	1	231176S	<502>,<502E>,<8250>
PCB	L5804	S COIL	S-1.3C	1	231176S	<502>,<502E>,<8250>
PCB	L5805	S COIL	S-1.3C	1	231176S	<502>,<502E>,<8250>
PCB	C241	CERA C	CK45F50V-103Z	1	335621030	
PCB	C5000	TF C	ECQ-B50V-101K	1	374721015	
PCB	C5001	TF C	ECQ-B50V-101K	1	374721015	
PCB	C5002	TF C	ECQ-B50V-101K	1	374721015	
PCB	C5003	TF C	ECQ-B50V-101K	1	374721015	
PCB	C5004	TF C	ECQ-B50V-101K	1	374721015	
PCB	C5005	TF C	ECQ-B50V-101K	1	374721015	
PCB	C5010	VX C	CE04W16V-47M(VX)	1	393344707	
PCB	C5011	VX C	CE04W16V-47M(VX)	1	393344707	
PCB	C5012	VX C	CE04W16V-22M(VX)	1	393342207	
PCB	C5013	VX C	CE04W16V-22M(VX)	1	393342207	
PCB	C5014	VX C	CE04W16V-22M(VX)	1	393342207	
PCB	C5015	VX C	CE04W16V-22M(VX)	1	393342207	
PCB	C5020	VR C	CE04W50V-10M(VR)	1	394681007	
PCB	C5021	VR C	CE04W50V-10M(VR)	1	394681007	
PCB	C5022	VR C	CE04W50V-10M(VR)	1	394681007	
PCB	C5023	VR C	CE04W50V-10M(VR)	1	394681007	
PCB	C5024	VR C	CE04W50V-10M(VR)	1	394681007	
PCB	C5025	VR C	CE04W50V-10M(VR)	1	394681007	
PCB	C5040	VX C	CE04W16V-220M(VX)	1	393342217	
PCB	C5041	VX C	CE04W16V-220M(VX)	1	393342217	
PCB	C5042	VX C	CE04W16V-220M(VX)	1	393342217	
PCB	C5043	VX C	CE04W16V-220M(VX)	1	393342217	
PCB	C5044	VX C	CE04W16V-220M(VX)	1	393342217	
PCB	C5045	VX C	CE04W16V-220M(VX)	1	393342217	
PCB	C5050	VR C	CE04W50V-47M(VR)	1	394684707	
PCB	C5051	VR C	CE04W50V-47M(VR)	1	394684707	
PCB	C5052	VR C	CE04W50V-47M(VR)	1	394684707	
PCB	C5053	VR C	CE04W50V-47M(VR)	1	394684707	
PCB	C5054	VR C	CE04W50V-47M(VR)	1	394684707	
PCB	C5055	VR C	CE04W50V-47M(VR)	1	394684707	

PCB	C5080	CERA C	CC45SL50V-040D	1	345020402	
PCB	C5080 or	CERA C	CC45SL50V-040C	(1)	345020401	
PCB	C5081	CERA C	CC45SL50V-040D	1	345020402	
PCB	C5081 or	CERA C	CC45SL50V-040C	(1)	345020401	
PCB	C5082	CERA C	CC45SL50V-040D	1	345020402	
PCB	C5082 or	CERA C	CC45SL50V-040C	(1)	345020401	
PCB	C5083	CERA C	CC45SL50V-040D	1	345020402	
PCB	C5083 or	CERA C	CC45SL50V-040C	(1)	345020401	
PCB	C5084	CERA C	CC45SL50V-040D	1	345020402	
PCB	C5084 or	CERA C	CC45SL50V-040C	(1)	345020401	
PCB	C5085	CERA C	CC45SL50V-040D	1	345020402	
PCB	C5085 or	CERA C	CC45SL50V-040C	(1)	345020401	
PCB	C5090	CERA C	CC45SL50V-101J	1	345021014	
PCB	C5091	CERA C	CC45SL50V-101J	1	345021014	
PCB	C5092	CERA C	CC45SL50V-101J	1	345021014	
PCB	C5093	CERA C	CC45SL50V-101J	1	345021014	
PCB	C5094	CERA C	CC45SL50V-101J	1	345021014	
PCB	C5095	CERA C	CC45SL50V-101J	1	345021014	
PCB	C5100	VR C	CE04W63V-10M(VR)	1	394671007	<502>,<502E>,<8250>
PCB	C5100	VR C	CE04W100V-10M(VR)	1	394691007	<520>
PCB	C5101	VR C	CE04W63V-10M(VR)	1	394671007	<502>,<502E>,<8250>
PCB	C5101	VR C	CE04W100V-10M(VR)	1	394691007	<520>
PCB	C5102	VR C	CE04W63V-10M(VR)	1	394671007	<502>,<502E>,<8250>
PCB	C5102	VR C	CE04W100V-10M(VR)	1	394691007	<520>
PCB	C5103	VR C	CE04W63V-10M(VR)	1	394671007	<502>,<502E>,<8250>
PCB	C5103	VR C	CE04W100V-10M(VR)	1	394691007	<520>
PCB	C5104	VR C	CE04W63V-10M(VR)	1	394671007	<502>,<502E>,<8250>
PCB	C5104	VR C	CE04W100V-10M(VR)	1	394691007	<520>
PCB	C5105	VR C	CE04W63V-10M(VR)	1	394671007	<502>,<502E>,<8250>
PCB	C5105	VR C	CE04W100V-10M(VR)	1	394691007	<520>
PCB	C5110	VR C	CE04W63V-10M(VR)	1	394671007	<502>,<502E>,<8250>
PCB	C5110	VR C	CE04W100V-10M(VR)	1	394691007	<520>
PCB	C5111	VR C	CE04W63V-10M(VR)	1	394671007	<502>,<502E>,<8250>
PCB	C5111	VR C	CE04W100V-10M(VR)	1	394691007	<520>
PCB	C5112	VR C	CE04W63V-10M(VR)	1	394671007	<502>,<502E>,<8250>
PCB	C5112	VR C	CE04W100V-10M(VR)	1	394691007	<520>
PCB	C5113	VR C	CE04W63V-10M(VR)	1	394671007	<502>,<502E>,<8250>
PCB	C5113	VR C	CE04W100V-10M(VR)	1	394691007	<520>
PCB	C5114	VR C	CE04W63V-10M(VR)	1	394671007	<502>,<502E>,<8250>
PCB	C5114	VR C	CE04W100V-10M(VR)	1	394691007	<520>
PCB	C5115	VR C	CE04W63V-10M(VR)	1	394671007	<502>,<502E>,<8250>
PCB	C5115	VR C	CE04W100V-10M(VR)	1	394691007	<520>
PCB	C5800	TF C	ECQ-B50V-103J	1	374721034	<502><502E><8250>
PCB	C5801	CERA C	CK45F50V-103Z	1	335621030	<502>,<502E>,<8250>
PCB	C5804	TF C	ECQ-B50V-103J	1	374721034	<502>,<502E>,<8250>
PCB	C5840	TF C	ECQ-B50V-222J	1	374722224	<502 PA,WT,GK,GQ,GR,PT>
PCB	C5840	TF C	ECQ-B50V-222J	1	374722224	<502E>,<8250>
PCB	C5841	TF C	ECQ-B50V-222J	1	374722224	<502 PA,WT,GK,GQ,GR,PT>
PCB	C5841	TF C	ECQ-B50V-222J	1	374722224	<502E>,<8250>
PCB	C5842	TF C	ECQ-B50V-222J	1	374722224	<502 PA,WT,GK,GQ,GR,PT>
PCB	C5842	TF C	ECQ-B50V-222J	1	374722224	<502E>,<8250>
PCB	C5843	TF C	ECQ-B50V-222J	1	374722224	<502 PA,WT,GK,GQ,GR,PT>
PCB	C5843	TF C	ECQ-B50V-222J	1	374722224	<502E>,<8250>
PCB	C5844	TF C	ECQ-B50V-222J	1	374722224	<502 PA,WT,GK,GQ,GR,PT>
PCB	C5844	TF C	ECQ-B50V-222J	1	374722224	<502E>,<8250>
PCB	C5845	TF C	ECQ-B50V-222J	1	374722224	<502 PA,WT,GK,GQ,GR,PT>
PCB	C5845	TF C	ECQ-B50V-222J	1	374722224	<502E>,<8250
PCB	C5846	TF C	ECQ-B50V-222J	1	374722224	<502 PA,WT,GK,GQ,GR,PT>
PCB	C5846	TF C	ECQ-B50V-222J	1	374722224	<502E>,<8250>
PCB	C5847	TF C	ECQ-B50V-222J	1	374722224	<502 PA,WT,GK,GQ,GR,PT>
PCB	C5847	TF C	ECQ-B50V-222J	1	374722224	<502E>,<8250>
PCB	C5850	CERA C	CK45B50V-102K	1	335321025	<502 PA,WT,GK,GQ,GR,PT>
PCB	C5850	CERA C	CK45B50V-102K	1	335321025	<502E>,<8250>
PCB	C5851	CERA C	CK45B50V-102K	1	335321025	<502 PA,WT,GK,GQ,GR,PT>
PCB	C5851	CERA C	CK45B50V-102K	1	335321025	<502E>,<8250>
PCB	C5852	CERA C	CK45B50V-102K	1	335321025	<502 PA,WT,GK,GQ,GR,PT>
PCB	C5852	CERA C	CK45B50V-102K	1	335321025	<502E>,<8250>
PCB	C5853	CERA C	CK45B50V-102K	1	335321025	<502 PA,WT,GK,GQ,GR,PT>
PCB	C5853	CERA C	CK45B50V-102K	1	335321025	<502E>,<8250>
PCB	C5854	CERA C	CK45B50V-102K	1	335321025	<502 PA,WT,GK,GQ,GR,PT>
PCB	C5854	CERA C	CK45B50V-102K	1	335321025	<502E>,<8250>
PCB	C5855	CERA C	CK45B50V-102K	1	335321025	<502 PA,WT,GK,GQ,GR,PT>
PCB	C5855	CERA C	CK45B50V-102K	1	335321025	<502E>,<8250>

PCB	C6800	TF C	ECQ-B50V-103J	1	374721034	<520>
PCB	C6801	CERA C	CK45F50V-103Z	1	335621030	<520>
PCB	C6804	TF C	ECQ-B50V-103J	1	374721034	<520>
PCB	C6931	VR C	CE04W25V-1000M(VR)	1	394651027S	
PCB	C6931 or	ELECT C	CE04W25V1000M(SC)	(1)	394751027S	
PCB	C6932	CERA C	CK45F50V-103Z	1	335621030	
PCB	C6933	VR C	CE04W16V-10M(VR)	1	394641007	
PCB	C6933 or	ELECT C	CE04W16V10M(SC)	(1)	394741007	
PCB	C9513	CERA C	CK45F50V-223Z	1	335622230	
PCB	R249	CARBON R	R16J-1K	1	417341024	
PCB	R5000	CARBON R	R16J-1K	1	417341024	
PCB	R5001	CARBON R	R16J-1K	1	417341024	
PCB	R5002	CARBON R	R16J-1K	1	417341024	
PCB	R5003	CARBON R	R16J-1K	1	417341024	
PCB	R5004	CARBON R	R16J-1K	1	417341024	
PCB	R5005	CARBON R	R16J-1K	1	417341024	
PCB	R5010	CARBON R	R16J-56K	1	417345634	
PCB	R5011	CARBON R	R16J-56K	1	417345634	
PCB	R5012	CARBON R	R16J-56K	1	417345634	
PCB	R5013	CARBON R	R16J-56K	1	417345634	
PCB	R5014	CARBON R	R16J-56K	1	417345634	
PCB	R5015	CARBON R	R16J-56K	1	417345634	
PCB	R5020	CARBON R	R16J-330	1	417343314	
PCB	R5021	CARBON R	R16J-330	1	417343314	
PCB	R5022	CARBON R	R16J-330	1	417343314	
PCB	R5023	CARBON R	R16J-330	1	417343314	
PCB	R5024	CARBON R	R16J-330	1	417343314	
PCB	R5025	CARBON R	R16J-330	1	417343314	
PCB	R5030	CARBON R	R16J-56K	1	417345634	
PCB	R5031	CARBON R	R16J-56K	1	417345634	
PCB	R5032	CARBON R	R16J-56K	1	417345634	
PCB	R5033	CARBON R	R16J-56K	1	417345634	
PCB	R5034	CARBON R	R16J-56K	1	417345634	
PCB	R5035	CARBON R	R16J-56K	1	417345634	
PCB	R5040	CARBON R	R16J-2.2K	1	417342224	
PCB	R5041	CARBON R	R16J-2.2K	1	417342224	
PCB	R5042	CARBON R	R16J-2.2K	1	417342224	
PCB	R5043	CARBON R	R16J-2.2K	1	417342224	
PCB	R5044	CARBON R	R16J-2.2K	1	417342224	
PCB	R5045	CARBON R	R16J-2.2K	1	417342224	
PCB	R5050	CARBON R	R16J-4.7K	1	417344724	
PCB	R5051	CARBON R	R16J-4.7K	1	417344724	
PCB	R5052	CARBON R	R16J-4.7K	1	417344724	
PCB	R5053	CARBON R	R16J-4.7K	1	417344724	
PCB	R5054	CARBON R	R16J-4.7K	1	417344724	
PCB	R5055	CARBON R	R16J-4.7K	1	417344724	
PCB	R5060	CARBON R	R16J-1.2K	1	417341224	
PCB	R5061	CARBON R	R16J-1.2K	1	417341224	
PCB	R5062	CARBON R	R16J-1.2K	1	417341224	
PCB	R5063	CARBON R	R16J-1.2K	1	417341224	
PCB	R5064	CARBON R	R16J-1.2K	1	417341224	
PCB	R5065	CARBON R	R16J-1.2K	1	417341224	
PCB	R5080	CARBON R	R16J-470	1	417344714	
PCB	R5081	CARBON R	R16J-470	1	417344714	
PCB	R5082	CARBON R	R16J-470	1	417344714	
PCB	R5083	CARBON R	R16J-470	1	417344714	
PCB	R5084	CARBON R	R16J-470	1	417344714	
PCB	R5085	CARBON R	R16J-470	1	417344714	
PCB	R5090	CARBON R	R16J-82K	1	417348234	<502>,<502E>,<8250>
PCB	R5090	CARBON R	R16J-100K	1	417341044	<520>
PCB	R5091	CARBON R	R16J-82K	1	417348234	<502>,<502E>,<8250>
PCB	R5091	CARBON R	R16J-100K	1	417341044	<520>
PCB	R5092	CARBON R	R16J-82K	1	417348234	<502>,<502E>,<8250>
PCB	R5092	CARBON R	R16J-100K	1	417341044	<520>
PCB	R5093	CARBON R	R16J-82K	1	417348234	<502>,<502E>,<8250>
PCB	R5093	CARBON R	R16J-100K	1	417341044	<520>
PCB	R5094	CARBON R	R16J-82K	1	417348234	<502>,<502E>,<8250>
PCB	R5094	CARBON R	R16J-100K	1	417341044	<520>
PCB	R5095	CARBON R	R16J-82K	1	417348234	<502>,<502E>,<8250>
PCB	R5095	CARBON R	R16J-100K	1	417341044	<520>
PCB	R5100	CARBON R	R16J-100K	1	417341044	
PCB	R5101	CARBON R	R16J-100K	1	417341044	
PCB	R5102	CARBON R	R16J-100K	1	417341044	

PCB	R5103	CARBON R	R16J-100K	1	417341044	
PCB	R5104	CARBON R	R16J-100K	1	417341044	
PCB	R5105	CARBON R	R16J-100K	1	417341044	
PCB	R5110	CARBON R	R16J-1K	1	417341024	
PCB	R5111	CARBON R	R16J-1K	1	417341024	
PCB	R5112	CARBON R	R16J-1K	1	417341024	
PCB	R5113	CARBON R	R16J-1K	1	417341024	
PCB	R5114	CARBON R	R16J-1K	1	417341024	
PCB	R5115	CARBON R	R16J-1K	1	417341024	
PCB	R5130	CARBON R	R16J-18K	1	417341834	<502>,<502E>,<8250>
PCB	R5130	CARBON R	R16J-22K	1	417342234	<520>
PCB	R5131	CARBON R	R16J-18K	1	417341834	<502>,<502E>,<8250>
PCB	R5131	CARBON R	R16J-22K	1	417342234	<520>
PCB	R5132	CARBON R	R16J-18K	1	417341834	
PCB	R5133	CARBON R	R16J-18K	1	417341834	
PCB	R5134	CARBON R	R16J-18K	1	417341834	
PCB	R5135	CARBON R	R16J-18K	1	417341834	
PCB	R5140	CARBON R	R16J-18K	1	417341834	<502>,<502E>,<8250>
PCB	R5140	CARBON R	R16J-22K	1	417342234	<520>
PCB	R5141	CARBON R	R16J-18K	1	417341834	<502>,<502E>,<8250>
PCB	R5141	CARBON R	R16J-22K	1	417342234	<520>
PCB	R5160	NF CARBON R	R25J-120	1	415471214	<502>,<502E>,<8250>
PCB	R5160	NF CARBON R	R25J-150	1	415471514	<520>
PCB	R5161	NF CARBON R	R25J-120	1	415471214	<502>,<502E>,<8250>
PCB	R5161	NF CARBON R	R25J-150	1	415471514	<520>
PCB	R5162	NF CARBON R	R25J-120	1	415471214	<502>,<502E>,<8250>
PCB	R5162	NF CARBON R	R25J-150	1	415471514	<520>
PCB	R5163	NF CARBON R	R25J-120	1	415471214	<502>,<502E>,<8250>
PCB	R5163	NF CARBON R	R25J-150	1	415471514	<520>
PCB	R5164	NF CARBON R	R25J-120	1	415471214	<502>,<502E>,<8250>
PCB	R5164	NF CARBON R	R25J-150	1	415471514	<520>
PCB	R5165	NF CARBON R	R25J-120	1	415471214	<502>,<502E>,<8250>
PCB	R5165	NF CARBON R	R25J-150	1	415471514	<520>
PCB	R5170	NF CARBON R	R25J-120	1	415471214	<502>,<502E>,<8250>
PCB	R5170	NF CARBON R	R25J-150	1	415471514	<520>
PCB	R5171	NF CARBON R	R25J-120	1	415471214	<502>,<502E>,<8250>
PCB	R5171	NF CARBON R	R25J-150	1	415471514	<520>
PCB	R5172	NF CARBON R	R25J-120	1	415471214	<502>,<502E>,<8250>
PCB	R5172	NF CARBON R	R25J-150	1	415471514	<520>
PCB	R5173	NF CARBON R	R25J-120	1	415471214	<502>,<502E>,<8250>
PCB	R5173	NF CARBON R	R25J-150	1	415471514	<520>
PCB	R5174	NF CARBON R	R25J-120	1	415471214	<502>,<502E>,<8250>
PCB	R5174	NF CARBON R	R25J-150	1	415471514	<520>
PCB	R5175	NF CARBON R	R25J-120	1	415471214	<502>,<502E>,<8250>
PCB	R5175	NF CARBON R	R25J-150	1	415471514	<520>
PCB	R5180	NF CARBON R	R25J-10	1	415471004	
PCB	R5181	NF CARBON R	R25J-10	1	415471004	
PCB	R5182	NF CARBON R	R25J-10	1	415471004	
PCB	R5183	NF CARBON R	R25J-10	1	415471004	
PCB	R5184	NF CARBON R	R25J-10	1	415471004	
PCB	R5185	NF CARBON R	R25J-10	1	415471004	
PCB	R5190	NF CARBON R	R25J-10	1	415471004	
PCB	R5191	NF CARBON R	R25J-10	1	415471004	
PCB	R5192	NF CARBON R	R25J-10	1	415471004	
PCB	R5193	NF CARBON R	R25J-10	1	415471004	
PCB	R5194	NF CARBON R	R25J-10	1	415471004	
PCB	R5195	NF CARBON R	R25J-10	1	415471004	
PCB	R5800	CARBON R	R16J-22	1	417342204	<502 PA,WT,GK,GQ,GR,PT>
PCB	R5800	CARBON R	R16J-22	1	417342204	<502E>,<8250
PCB	R5801	CARBON R	R16J-22	1	417342204	<502 PA,WT,GK,GQ,GR,PT>
PCB	R5801	CARBON R	R16J-22	1	417342204	<502E>,<8250>
PCB	R5802	CARBON R	R16J-22	1	417342204	<502 PA,WT,GK,GQ,GR,PT>
PCB	R5802	CARBON R	R16J-22	1	417342204	<502E>,<8250>
PCB	R5803	CARBON R	R16J-22	1	417342204	<502 PA,WT,GK,GQ,GR,PT>
PCB	R5803	CARBON R	R16J-22	1	417342204	<502E>,<8250>
PCB	R5804	CARBON R	R16J-22	1	417342204	<502 PA,WT,GK,GQ,GR,PT>
PCB	R5804	CARBON R	R16J-22	1	417342204	<502E>,<8250>
PCB	R5805	CARBON R	R16J-22	1	417342204	<502 PA,WT,GK,GQ,GR,PT>
PCB	R5805	CARBON R	R16J-22	1	417342204	<502E>,<8250>
PCB	R5810	CARBON R	R16J-22	1	417342204	<502 PA,WT,GK,GQ,GR,PT>
PCB	R5810	CARBON R	R16J-22	1	417342204	<502E>,<8250>
PCB	R5811	CARBON R	R16J-22	1	417342204	<502 PA,WT,GK,GQ,GR,PT>
PCB	R5811	CARBON R	R16J-22	1	417342204	<502E>,<8250>

PCB	R5812	CARBON R	R16J-22	1	417342204	<502 PA,WT,GK,GQ,GR,PT>
PCB	R5812	CARBON R	R16J-22	1	417342204	<502E>,<8250>
PCB	R5813	CARBON R	R16J-22	1	417342204	<502 PA,WT,GK,GQ,GR,PT>
PCB	R5813	CARBON R	R16J-22	1	417342204	<502E>,<8250>
PCB	R5814	CARBON R	R16J-22	1	417342204	<502 PA,WT,GK,GQ,GR,PT>
PCB	R5814	CARBON R	R16J-22	1	417342204	<502E>,<8250>
PCB	R5815	CARBON R	R16J-22	1	417342204	<502 PA,WT,GK,GQ,GR,PT>
PCB	R5815	CARBON R	R16J-22	1	417342204	<502E>,<8250>
PCB	R6935	METAL O R	RS2WBJ-120	1	441721214F	
PCB	R9501	METAL R	RNU1/2WCJ-1	1	453530104	
PCB	R9502	METAL R	RNU1/2WCJ-0.47	1	453534794	
PCB	R9503	METAL R	RNU1/2WCJ-0.22	1	453532294	
PCB	R9521	METAL R	RNU1/2WCJ-3.3	1	453530334	<502>,<502E>,<8250>
PCB	RL241	RELAY	NRL-2P1A-DC4.5-156	1	25065610	
PCB	RL241 or	RELAY	NPL-2P1A-DC4.5-169	(1)	25065645	
PCB	RL241 or	RELAY	NRL-2P2A-DC4.5-173	(1)	25065658	
PCB	RL241 or	RELAY	NRL-2P2A-DC4.5-172	(1)	25065654	
PCB	RL241A	TAPE	TAPE(CLOTH-16U)	1	29110083	
PCB	RL242	RELAY	NRL-2P1A-DC4.5-156	1	25065610	
PCB	RL242 or	RELAY	NPL-2P1A-DC4.5-169	(1)	25065645	
PCB	RL242 or	RELAY	NRL-2P2A-DC4.5-173	(1)	25065658	
PCB	RL242 or	RELAY	NRL-2P2A-DC4.5-172	(1)	25065654	
PCB	RL242A	TAPE	TAPE(CLOTH-16U)	1	29110083	
PCB	RL5800	RELAY	NRL-2P5A-DC24-158	1	25065618	<502>,<502E>,<8250>
PCB	RL5800 or	RELAY	NRL-2P5A-DC24-098	(1)	25065517	<502>,<502E>,<8250>
PCB	RL5800 or	RELAY	NRL-2P5A-DC24-129	(1)	25065563	<502>,<502E>,<8250>
PCB	RL5800A	TAPE	TAPE(CLOTH-16U)	1	29110083	<502>,<502E>,<8250>
PCB	RL5801	RELAY	NRL-2P5A-DC24-158	1	25065618	<502>,<502E>,<8250>
PCB	RL5801 or	RELAY	NRL-2P5A-DC24-098	(1)	25065517	<502>,<502E>,<8250>
PCB	RL5801 or	RELAY	NRL-2P5A-DC24-129	(1)	25065563	<502>,<502E>,<8250>
PCB	RL5801A	TAPE	TAPE(CLOTH-16U)	1	29110083	<502>,<502E>,<8250>
PCB	RL5803	RELAY	NRL-2P5A-DC24-158	1	25065618	<502>,<502E>,<8250>
PCB	RL5803 or	RELAY	NRL-2P5A-DC24-098	(1)	25065517	<502>,<502E>,<8250>
PCB	RL5803 or	RELAY	NRL-2P5A-DC24-129	(1)	25065563	<502>,<502E>,<8250>
PCB	RL5803A	TAPE	TAPE(CLOTH-16U)	1	29110083	<502>,<502E>,<8250>
PCB	RL5804	RELAY	NRL-2P5A-DC24-158	1	25065618	<502>,<502E>,<8250>
PCB	RL5804 or	RELAY	NRL-2P5A-DC24-098	(1)	25065517	<502>,<502E>,<8250>
PCB	RL5804 or	RELAY	NRL-2P5A-DC24-129	(1)	25065563	<502>,<502E>,<8250>
PCB	RL5804A	TAPE	TAPE(CLOTH-16U)	1	29110083	<502>,<502E>,<8250>
PCB	RL6800	RELAY	NRL-2P5A-DC24-158	1	25065618	<520>
PCB	RL6800 or	RELAY	NRL-2P5A-DC24-098	(1)	25065517	<520>
PCB	RL6800 or	RELAY	NRL-2P5A-DC24-129	(1)	25065563	<520>
PCB	RL6800A	TAPE	TAPE(CLOTH-16U)	1	29110083	<520>
PCB	RL6801	RELAY	NRL-2P5A-DC24-158	1	25065618	<520>
PCB	RL6801 or	RELAY	NRL-2P5A-DC24-098	(1)	25065517	<520>
PCB	RL6801 or	RELAY	NRL-2P5A-DC24-129	(1)	25065563	<520>
PCB	RL6801A	TAPE	TAPE(CLOTH-16U)	1	29110083	<520>
PCB	RL6803	RELAY	NRL-2P5A-DC24-158	1	25065618	<520>
PCB	RL6803 or	RELAY	NRL-2P5A-DC24-098	(1)	25065517	<520>
PCB	RL6803 or	RELAY	NRL-2P5A-DC24-129	(1)	25065563	<520>
PCB	RL6803A	TAPE	TAPE(CLOTH-16U)	1	29110083	<520>
PCB	RL6804	RELAY	NRL-2P5A-DC24-158	1	25065618	<520>
PCB	RL6804 or	RELAY	NRL-2P5A-DC24-098	(1)	25065517	<520>
PCB	RL6804 or	RELAY	NRL-2P5A-DC24-129	(1)	25065563	<520>
PCB	RL6804A	TAPE	TAPE(CLOTH-16U)	1	29110083	<520>
PCB	P206A	PLUG	NPLG-15P667	1	25055711	
PCB	P241	PIN JACK	NPJ-9PDGLR483	1	25045686	
PCB	P241 or	PIN JACK	NPJ-9PDGLRGLRGLR564	(1)	25045784	
PCB	P243A	PLUG	NPLG-4P760	1	25055804	
PCB	P243B	SOCKET	NSCT-4P1313	1	25051526	
PCB	P306A	PLUG	NPLG-12P359	1	25055376	
PCB	P410A	SOCKET	NSCT-11P1026	1	25051236	
PCB	P411A	SOCKET	NSCT-10P1025	1	25051235	
PCB	P801B	SOCKET	NSCT-15P1030	1	25051240	
PCB	P5001	BUS BAR	BBL40	1	27141867	
PCB	P5005	WS CLAMP	CB-71683(L=50)	1	260261	
PCB	P5800	TRM	NTM-8PDMN304	1	25060373	<502 DD,DC>
PCB	P5800	TRM	NTM-8PDMN305	1	25060374	<502 PA,WT,GK,GQ,GR,PT,>
PCB	P5800	TRM	NTM-8PDMN305	1	25060374	<502E>,<8250>
PCB	P5802	TRM	NTM-8PDMN306	1	25060375	<502 DD,DC>
PCB	P5802	TRM	NTM-8PDMN307	1	25060376	<502 PA,WT,GK,GQ,GR,PT,>
PCB	P5802	TRM	NTM-8PDMN307	1	25060376	<502E>,<8250>
PCB	P6000A	SOCKET	NSCT-5P2185	1	25052288	

PCB	P6001A	SOCKET	NSCT-5P2185	1	25052288	
PCB	P6002A	SOCKET	NSCT-5P2185	1	25052288	
PCB	P6003A	SOCKET	NSCT-5P2185	1	25052288	
PCB	P6004A	SOCKET	NSCT-5P2185	1	25052288	
PCB	P6005A	SOCKET	NSCT-5P2185	1	25052288	
PCB	P6011A	SOCKET	NSCT-10P2190	1	25052293	
PCB	P6072	TRM	NTM-1P233(M1969)	1	25060302	
PCB	P6073	TRM	NTM-1P233(M1969)	1	25060302	
PCB	P6800	TRM	NTM-4PDMN308	1	25060377	<520>
PCB	P6801	TRM	NTM-4PDML309	1	25060378	<520>
PCB	P6802	TRM	NTM-8PDMN306	1	25060375	<520>
PCB	P6931A	SOCKET	NSCT-16P1314	1	25051527	
PCB	P7503B	SOCKET	NSCT-8P2138	1	25052241	
PCB	P7503Bor	SOCKET	NSCT-8P1101	(1)	25051312	
PCB	P7503Bor	SOCKET	NSCT-8P1841	(1)	25052054	
PCB	P7503Bor	SOCKET	NSCT-8P1639	(1)	25051852	
PCB	JL6803B	SOCKET	NSCT-6P98	1	25050270	<520>
PCB	JL6803C	SOCKET	NSCT-6P98	1	25050270	<502>,<502E>,<8250>
PCB	JL6804B	SOCKET	NSCT-6P98	1	25050270	<520>
PCB	JL6804C	SOCKET	NSCT-6P98	1	25050270	<502>,<502E>,<8250>
PCB	JL6805B	SOCKET	NSCT-4P96	1	25050268	<520>
PCB	JL6805C	SOCKET	NSCT-4P96	1	25050268	<502>,<502E>,<8250>
PCB	JL9501A	WIRE HOL	NSCT-7P898	1	25051111	
PCB	JL9501B	WIRE HOL	NSCT-7P898	1	25051111	

U16 **POWER AMPLIFIER PC BOARD (NAAF-8245-1A/1C/1D/1E/1F/1H/1J/1K)**
U17 **POWER SWITCH PC BOARD (NASW-8246-1A/1C/1D/1E/1F/1H/1J/1K)**
U18 **TERMINAL SENSOR PC BOARD (NAPS-8247-1A/1C/1D/1E/1F/1H/1J/1K)**
U19 **POWER SUPPLY PC BOARD (NAPS-8248-1A/1C/1D/1E/1F/1H/1J/1K)**
U20 **TERMINAL PC BOARD (NAPS-8249-1A/1C/1D/1E/1F/1H/1J/1K)**
U21 **VIDEO PC BOARD (NAVD-8250-1A/1C/1D/1E/1F/1H/1J/1K)**
U25 **OUTLET TERMINAL PC BOARD (NAETC-8254-1A/1C/1D/1E/1F/1H/1J/1K)**
U26 **TERMINAL SENSOR PC BOARD (NAETC-8255-1A/1C/1D/1E/1F/1H/1J/1K)**

<Notes> Parts are indicated collectively, without dividing for above-mentioned each substrate.

NOTE : THE COMPONENTS IDENTIFIED BY THE MARK ! ARE CRITICAL FOR RISK OF FIRE AND ELECTRIC SHOCK. REPLACE ONLY WITH PART NUMBER SPECIFIED.

<Notes>

<**502**>:TX-SR502
<**502E**>:TX-SR502E(European model)
<**8250**>:TX-SR8250(Chinese model)
<**520**>:HT-R520(American model & Canadian model)

<**DC**> : Canadian model
<**DD**> : American model
<**GK**> : Korean model
<**GQ**> : Hong kong model
<**GR**> : Chinese model
<**PA**> : Australian model
<**PT**> : Asian model (230-240V)
<**WT**> : World wide model

	REF. NO.	NAME	DESCRIPTION	Q'TY	PART NO	REMARKS
PCB	U281	PHT CP	TORX179L	1	24120101	
PCB	U282	PHT CP	TORX179L	1	24120101	
PCB	U283	PHT CP	TORX179L	1	24120101	
PCB	Q201	TR	RN1241-A	1	2213631	
PCB	Q201 or	TR	RN1241-B	(1)	2213632	
PCB	Q202	TR	RN1241-A	1	2213631	
PCB	Q202 or	TR	RN1241-B	(1)	2213632	
PCB	Q203	IC	LA7956	1	22241759	
PCB	Q204	TR	KTA1267-GR	1	2215995	
PCB	Q204 or	TR	2SA933S-R	(1)	2213354	
PCB	Q205	TR	KRA102M	1	2215770	
PCB	Q205 or	TR	DTA114ES	(1)	2213510	
PCB	Q206	TR	KRA102M	1	2215770	
PCB	Q206 or	TR	DTA114ES	(1)	2213510	
PCB	Q207	TR	RN1241-A	1	2213631	
PCB	Q207 or	TR	RN1241-B	(1)	2213632	
PCB	Q208	TR	RN1241-A	1	2213631	
PCB	Q208 or	TR	RN1241-B	(1)	2213632	
PCB	Q209	TR	KTA1267-GR	1	2215995	
PCB	Q209 or	TR	2SA933S-R	(1)	2213354	
PCB	Q210	TR	RN1241-A	1	2213631	
PCB	Q210 or	TR	RN1241-B	(1)	2213632	
PCB	Q211	TR	RN1241-A	1	2213631	
PCB	Q211 or	TR	RN1241-B	(1)	2213632	

PCB	Q212	IC	LA7956	1	22241759	
PCB	Q213	IC	LA7956	1	22241759	
PCB	Q281	IC	74HCU04F	1	222740046R2	
PCB	Q921	TR	KTC3199-GR	1	2215864	
PCB	Q921 or	TR	2SC2458-GR	(1)	2212115	
PCB	Q921 or	TR	2SC1740S-R	(1)	2213284	
PCB	Q921 or	TR	2SC1740S-S	(1)	2213285	
PCB	Q6010	TR	2SC1740S-R	1	2213284	
PCB	Q6010 or	TR	2SC1740S-S	(1)	2213285	
PCB	Q6011	TR	2SC1740S-R	1	2213284	
PCB	Q6011 or	TR	2SC1740S-S	(1)	2213285	
PCB	Q6012	TR	2SC1740S-R	1	2213284	
PCB	Q6012 or	TR	2SC1740S-S	(1)	2213285	
PCB	Q6013	TR	2SC1740S-R	1	2213284	
PCB	Q6013 or	TR	2SC1740S-S	(1)	2213285	
PCB	Q6014	TR	2SC1740S-R	1	2213284	
PCB	Q6014 or	TR	2SC1740S-S	(1)	2213285	
PCB	Q6015	TR	2SC1740S-R	1	2213284	
PCB	Q6015 or	TR	2SC1740S-S	(1)	2213285	
PCB	Q6020	TR	2SC1740S-R	1	2213284	
PCB	Q6020 or	TR	2SC1740S-S	(1)	2213285	
PCB	Q6021	TR	2SC1740S-R	1	2213284	
PCB	Q6021 or	TR	2SC1740S-S	(1)	2213285	
PCB	Q6022	TR	2SC1740S-R	1	2213284	
PCB	Q6022 or	TR	2SC1740S-S	(1)	2213285	
PCB	Q6023	TR	2SC1740S-R	1	2213284	
PCB	Q6023 or	TR	2SC1740S-S	(1)	2213285	
PCB	Q6024	TR	2SC1740S-R	1	2213284	
PCB	Q6024 or	TR	2SC1740S-S	(1)	2213285	
PCB	Q6025	TR	2SC1740S-R	1	2213284	
PCB	Q6025 or	TR	2SC1740S-S	(1)	2213285	
PCB	Q6030	TR	KTD2061-Y	1	2203434	
PCB	Q6030 or	TR	2SC5171	(1)	2203010	
PCB	Q6031	TR	KTD2061-Y	1	2203434	
PCB	Q6031 or	TR	2SC5171	(1)	2203010	
PCB	Q6032	TR	KTD2061-Y	1	2203434	
PCB	Q6032 or	TR	2SC5171	(1)	2203010	
PCB	Q6033	TR	KTD2061-Y	1	2203434	<520>
PCB	Q6033 or	TR	2SC5171	(1)	2203010	<520>
PCB	Q6033	TR	2SC5511-E	1	2203845	<502>,<502E>,<8250>
PCB	Q6033 or	TR	KTD2061-Y	(1)	2203434	<502>,<502E>,<8250>
PCB	Q6033 or	TR	2SC5171	(1)	2203010	<502>,<502E>,<8250>
PCB	Q6034	TR	KTD2061-Y	1	2203434	<520>
PCB	Q6034 or	TR	2SC5171	(1)	2203010	<520>
PCB	Q6034	TR	2SC5511-E	1	2203845	<502>,<502E>,<8250>
PCB	Q6034 or	TR	KTD2061-Y	(1)	2203434	<502>,<502E>,<8250>
PCB	Q6034 or	TR	2SC5171	(1)	2203010	<502>,<502E>,<8250>
PCB	Q6035	TR	KTD2061-Y	1	2203434	<520>
PCB	Q6035 or	TR	2SC5171	(1)	2203010	<520>
PCB	Q6035	TR	2SC5511-E	1	2203845	<502>,<502E>,<8250>
PCB	Q6035 or	TR	KTD2061-Y	(1)	2203434	<502>,<502E>,<8250>
PCB	Q6035 or	TR	2SC5171	(1)	2203010	<502>,<502E>,<8250>
PCB	Q6040	TR	KTB1369-Y	1	2203424	
PCB	Q6040 or	TR	2SA1930	(1)	2203000	
PCB	Q6041	TR	KTB1369-Y	1	2203424	
PCB	Q6041 or	TR	2SA1930	(1)	2203000	
PCB	Q6042	TR	KTB1369-Y	1	2203424	
PCB	Q6042 or	TR	2SA1930	(1)	2203000	
PCB	Q6043	TR	KTB1369-Y	1	2203424	<520>
PCB	Q6043 or	TR	2SA1930	(1)	2203000	<520>
PCB	Q6043	TR	2SA2005-E	1	2203835	<502>,<502E>,<8250>
PCB	Q6043 or	TR	KTB1369-Y	(1)	2203424	<502>,<502E>,<8250>
PCB	Q6043 or	TR	2SA1930	(1)	2203000	<502>,<502E>,<8250>
PCB	Q6044	TR	KTB1369-Y	1	2203424	<520>
PCB	Q6044 or	TR	2SA1930	(1)	2203000	<520>
PCB	Q6044	TR	2SA2005-E	1	2203835	<502>,<502E>,<8250>
PCB	Q6044 or	TR	KTB1369-Y	(1)	2203424	<502>,<502E>,<8250>
PCB	Q6044 or	TR	2SA1930	(1)	2203000	<502>,<502E>,<8250>
PCB	Q6045	TR	KTB1369-Y	1	2203424	<520>
PCB	Q6045 or	TR	2SA1930	(1)	2203000	<520>
PCB	Q6045	TR	2SA2005-E	1	2203835	<502>,<502E>,<8250>
PCB	Q6045 or	TR	KTB1369-Y	(1)	2203424	<502>,<502E>,<8250>
PCB	Q6045 or	TR	2SA1930	(1)	2203000	<502>,<502E>,<8250>

PCB	Q6070	TR	KTC3200-BL	1	2215896	<502 DD,DC>
PCB	Q6070 or	TR	KTC3200-GR	(1)	2215895	<502 DD,DC>
PCB	Q6070 or	TR	2SC1775A-E	(1)	2210755	<502 DD,DC>
PCB	Q6070 or	TR	2SC1775A-F	(1)	2210756	<502 DD,DC>
PCB	Q6070 or	TR	2SC1845-F	(1)	2211732	<502 DD,DC>
PCB	Q6070 or	TR	2SC1845-E	(1)	2211733	<502 DD,DC>
PCB	Q6070	TR	KTC3200-BL	1	2215896	<502 PA,PT,GR,GK,GQ,WT>
PCB	Q6070 or	TR	KTC3200-GR	(1)	2215895	<502 PA,PT,GR,GK,GQ,WT>
PCB	Q6070 or	TR	2SC1775A-E	(1)	2210755	<502 PA,PT,GR,GK,GQ,WT>
PCB	Q6070 or	TR	2SC1775A-F	(1)	2210756	<502 PA,PT,GR,GK,GQ,WT>
PCB	Q6070 or	TR	2SC1845-F	(1)	2211732	<502 PA,PT,GR,GK,GQ,WT>
PCB	Q6070 or	TR	2SC1845-E	(1)	2211733	<502 PA,PT,GR,GK,GQ,WT>
PCB	Q6070	TR	KTC3200-BL	1	2215896	<502E>,<8250>
PCB	Q6070 or	TR	KTC3200-GR	(1)	2215895	<502E>,<8250>
PCB	Q6070 or	TR	2SC1775A-E	(1)	2210755	<502E>,<8250>
PCB	Q6070 or	TR	2SC1775A-F	(1)	2210756	<502E>,<8250>
PCB	Q6070 or	TR	2SC1845-F	(1)	2211732	<502E>,<8250>
PCB	Q6070 or	TR	2SC1845-E	(1)	2211733	<502E>,<8250>
PCB	Q6070	TR	2SC2631-R	1	2214984	<520>
PCB	Q6070 or	TR	2SC2631-S	(1)	2214985	<520>
PCB	Q6071	TR	KTC3200-BL	1	2215896	<502 DD,DC>
PCB	Q6071 or	TR	KTC3200-GR	(1)	2215895	<502 DD,DC>
PCB	Q6071 or	TR	2SC1775A-E	(1)	2210755	<502 DD,DC>
PCB	Q6071 or	TR	2SC1775A-F	(1)	2210756	<502 DD,DC>
PCB	Q6071 or	TR	2SC1845-F	(1)	2211732	<502 DD,DC>
PCB	Q6071 or	TR	2SC1845-E	(1)	2211733	<502 DD,DC>
PCB	Q6071	TR	KTC3200-BL	1	2215896	<502 PA,PT,GR,GK,GQ,WT>
PCB	Q6071 or	TR	KTC3200-GR	(1)	2215895	<502 PA,PT,GR,GK,GQ,WT>
PCB	Q6071 or	TR	2SC1775A-E	(1)	2210755	<502 PA,PT,GR,GK,GQ,WT>
PCB	Q6071 or	TR	2SC1775A-F	(1)	2210756	<502 PA,PT,GR,GK,GQ,WT>
PCB	Q6071 or	TR	2SC1845-F	(1)	2211732	<502 PA,PT,GR,GK,GQ,WT>
PCB	Q6071 or	TR	2SC1845-E	(1)	2211733	<502 PA,PT,GR,GK,GQ,WT>
PCB	Q6071	TR	KTC3200-BL	1	2215896	<502E>,<8250>
PCB	Q6071 or	TR	KTC3200-GR	(1)	2215895	<502E>,<8250>
PCB	Q6071 or	TR	2SC1775A-E	(1)	2210755	<502E>,<8250>
PCB	Q6071 or	TR	2SC1775A-F	(1)	2210756	<502E>,<8250>
PCB	Q6071 or	TR	2SC1845-F	(1)	2211732	<502E>,<8250>
PCB	Q6071 or	TR	2SC1845-E	(1)	2211733	<502E>,<8250>
PCB	Q6071	TR	2SC2631-R	1	2214984	<520>
PCB	Q6071 or	TR	2SC2631-S	(1)	2214985	<520>
PCB	Q6072	TR	KTC3200-BL	1	2215896	<502 DD,DC>
PCB	Q6072 or	TR	KTC3200-GR	(1)	2215895	<502 DD,DC>
PCB	Q6072 or	TR	2SC1775A-E	(1)	2210755	<502 DD,DC>
PCB	Q6072 or	TR	2SC1775A-F	(1)	2210756	<502 DD,DC>
PCB	Q6072 or	TR	2SC1845-F	(1)	2211732	<502 DD,DC>
PCB	Q6072 or	TR	2SC1845-E	(1)	2211733	<502 DD,DC>
PCB	Q6072	TR	KTC3200-BL	1	2215896	<502 PA,PT,GR,GK,GQ,WT>
PCB	Q6072 or	TR	KTC3200-GR	(1)	2215895	<502 PA,PT,GR,GK,GQ,WT>
PCB	Q6072 or	TR	2SC1775A-E	(1)	2210755	<502 PA,PT,GR,GK,GQ,WT>
PCB	Q6072 or	TR	2SC1775A-F	(1)	2210756	<502 PA,PT,GR,GK,GQ,WT>
PCB	Q6072 or	TR	2SC1845-F	(1)	2211732	<502 PA,PT,GR,GK,GQ,WT>
PCB	Q6072 or	TR	2SC1845-E	(1)	2211733	<502 PA,PT,GR,GK,GQ,WT>
PCB	Q6072	TR	KTC3200-BL	1	2215896	<502E><8250>
PCB	Q6072 or	TR	KTC3200-GR	(1)	2215895	<502E><8250>
PCB	Q6072 or	TR	2SC1775A-E	(1)	2210755	<502E><8250>
PCB	Q6072 or	TR	2SC1775A-F	(1)	2210756	<502E><8250>
PCB	Q6072 or	TR	2SC1845-F	(1)	2211732	<502E><8250>
PCB	Q6072 or	TR	2SC1845-E	(1)	2211733	<502E><8250>
PCB	Q6072	TR	2SC2631-R	1	2214984	<520>
PCB	Q6072 or	TR	2SC2631-S	(1)	2214985	<520>
PCB	Q6073	TR	KTC3200-BL	1	2215896	<502 DD,DC>
PCB	Q6073 or	TR	KTC3200-GR	(1)	2215895	<502 DD,DC>
PCB	Q6073 or	TR	2SC1775A-E	(1)	2210755	<502 DD,DC>
PCB	Q6073 or	TR	2SC1775A-F	(1)	2210756	<502 DD,DC>
PCB	Q6073 or	TR	2SC1845-F	(1)	2211732	<502 DD,DC>
PCB	Q6073 or	TR	2SC1845-E	(1)	2211733	<502 DD,DC>
PCB	Q6073	TR	KTC3200-BL	1	2215896	<502 PA,PT,GR,GK,GQ,WT>
PCB	Q6073 or	TR	KTC3200-GR	(1)	2215895	<502 PA,PT,GR,GK,GQ,WT>
PCB	Q6073 or	TR	2SC1775A-E	(1)	2210755	<502 PA,PT,GR,GK,GQ,WT>
PCB	Q6073 or	TR	2SC1775A-F	(1)	2210756	<502 PA,PT,GR,GK,GQ,WT>
PCB	Q6073 or	TR	2SC1845-F	(1)	2211732	<502 PA,PT,GR,GK,GQ,WT>
PCB	Q6073 or	TR	2SC1845-E	(1)	2211733	<502 PA,PT,GR,GK,GQ,WT>
PCB	Q6073	TR	KTC3200-BL	1	2215896	<502E>,<8250>

PCB	Q6073 or	TR	KTC3200-GR	(1)	2215895	<502E>,<8250>
PCB	Q6073 or	TR	2SC1775A-E	(1)	2210755	<502E>,<8250>
PCB	Q6073 or	TR	2SC1775A-F	(1)	2210756	<502E>,<8250>
PCB	Q6073 or	TR	2SC1845-F	(1)	2211732	<502E>,<8250>
PCB	Q6073 or	TR	2SC1845-E	(1)	2211733	<502E>,<8250>
PCB	Q6073	TR	2SC2631-R	1	2214984	<520>
PCB	Q6073 or	TR	2SC2631-S	(1)	2214985	<520>
PCB	Q6074	TR	KTC3200-BL	1	2215896	<502 DD,DC>
PCB	Q6074 or	TR	KTC3200-GR	(1)	2215895	<502 DD,DC>
PCB	Q6074 or	TR	2SC1775A-E	(1)	2210755	<502 DD,DC>
PCB	Q6074 or	TR	2SC1775A-F	(1)	2210756	<502 DD,DC>
PCB	Q6074 or	TR	2SC1845-F	(1)	2211732	<502 DD,DC>
PCB	Q6074 or	TR	2SC1845-E	(1)	2211733	<502 DD,DC>
PCB	Q6074	TR	KTC3200-BL	1	2215896	<502 PA,PT,GR,GK,GQ,WT>
PCB	Q6074 or	TR	KTC3200-GR	(1)	2215895	<502 PA,PT,GR,GK,GQ,WT>
PCB	Q6074 or	TR	2SC1775A-E	(1)	2210755	<502 PA,PT,GR,GK,GQ,WT>
PCB	Q6074 or	TR	2SC1775A-F	(1)	2210756	<502 PA,PT,GR,GK,GQ,WT>
PCB	Q6074 or	TR	2SC1845-F	(1)	2211732	<502 PA,PT,GR,GK,GQ,WT>
PCB	Q6074 or	TR	2SC1845-E	(1)	2211733	<502 PA,PT,GR,GK,GQ,WT>
PCB	Q6074	TR	KTC3200-BL	1	2215896	<502E>,<8250>
PCB	Q6074 or	TR	KTC3200-GR	(1)	2215895	<502E>,<8250>
PCB	Q6074 or	TR	2SC1775A-E	(1)	2210755	<502E>,<8250>
PCB	Q6074 or	TR	2SC1775A-F	(1)	2210756	<502E>,<8250>
PCB	Q6074 or	TR	2SC1845-F	(1)	2211732	<502E>,<8250>
PCB	Q6074 or	TR	2SC1845-E	(1)	2211733	<502E>,<8250>
PCB	Q6074	TR	2SC2631-R	1	2214984	<520>
PCB	Q6074 or	TR	2SC2631-S	(1)	2214985	<520>
PCB	Q6075	TR	KTC3200-BL	1	2215896	<502 DD,DC>
PCB	Q6075 or	TR	KTC3200-GR	(1)	2215895	<502 DD,DC>
PCB	Q6075 or	TR	2SC1775A-E	(1)	2210755	<502 DD,DC>
PCB	Q6075 or	TR	2SC1775A-F	(1)	2210756	<502 DD,DC>
PCB	Q6075 or	TR	2SC1845-F	(1)	2211732	<502 DD,DC>
PCB	Q6075 or	TR	2SC1845-E	(1)	2211733	<502 DD,DC>
PCB	Q6075	TR	KTC3200-BL	1	2215896	<502 PA,PT,GR,GK,GQ,WT>
PCB	Q6075 or	TR	KTC3200-GR	(1)	2215895	<502 PA,PT,GR,GK,GQ,WT>
PCB	Q6075 or	TR	2SC1775A-E	(1)	2210755	<502 PA,PT,GR,GK,GQ,WT>
PCB	Q6075 or	TR	2SC1775A-F	(1)	2210756	<502 PA,PT,GR,GK,GQ,WT>
PCB	Q6075 or	TR	2SC1845-F	(1)	2211732	<502 PA,PT,GR,GK,GQ,WT>
PCB	Q6075 or	TR	2SC1845-E	(1)	2211733	<502 PA,PT,GR,GK,GQ,WT>
PCB	Q6075	TR	KTC3200-BL	1	2215896	<502E>,<8250>
PCB	Q6075 or	TR	KTC3200-GR	(1)	2215895	<502E>,<8250>
PCB	Q6075 or	TR	2SC1775A-E	(1)	2210755	<502E>,<8250>
PCB	Q6075 or	TR	2SC1775A-F	(1)	2210756	<502E>,<8250>
PCB	Q6075 or	TR	2SC1845-F	(1)	2211732	<502E>,<8250>
PCB	Q6075 or	TR	2SC1845-E	(1)	2211733	<502E>,<8250>
PCB	Q6075	TR	2SC2631-R	1	2214984	<520>
PCB	Q6075 or	TR	2SC2631-S	(1)	2214985	<520>
PCB	Q6303	TR	KTA1267-GR	1	2215995	
PCB	Q6303 or	TR	2SA933S-R	(1)	2213354	
PCB	Q6303 or	TR	2SA933S-S	(1)	2213355	
PCB	Q6313	TR	KTA1267-GR	1	2215995	
PCB	Q6313 or	TR	2SA933S-R	(1)	2213354	
PCB	Q6313 or	TR	2SA933S-S	(1)	2213355	
PCB	Q6601	TR	KTC3199-GR	1	2215864	
PCB	Q6601 or	TR	2SC2458-GR	(1)	2212115	
PCB	Q6601 or	TR	2SC1740S-R	(1)	2213284	
PCB	Q6601 or	TR	2SC1740S-S	(1)	2213285	
PCB	Q6602	TR	KTC3199-GR	1	2215864	
PCB	Q6602 or	TR	2SC2458-GR	(1)	2212115	
PCB	Q6602 or	TR	2SC1740S-R	(1)	2213284	
PCB	Q6602 or	TR	2SC1740S-S	(1)	2213285	
PCB	Q6603	TR	KTC3199-GR	1	2215864	
PCB	Q6603 or	TR	2SC2458-GR	(1)	2212115	
PCB	Q6603 or	TR	2SC1740S-R	(1)	2213284	
PCB	Q6603 or	TR	2SC1740S-S	(1)	2213285	
PCB	Q6701	TR	KTC3200-BL	1	2215896	
PCB	Q6701 or	TR	KTC3200-GR	(1)	2215895	
PCB	Q6701 or	TR	2SC1775A-E	(1)	2210755	
PCB	Q6701 or	TR	2SC1775A-F	(1)	2210756	
PCB	Q6701 or	TR	2SC1845-F	(1)	2211732	
PCB	Q6701 or	TR	2SC1845-E	(1)	2211733	
PCB	Q6702	TR	KTC3200-BL	1	2215896	
PCB	Q6702 or	TR	KTC3200-GR	(1)	2215895	

PCB	Q6702 or	TR	2SC1775A-E	(1)	2210755
PCB	Q6702 or	TR	2SC1775A-F	(1)	2210756
PCB	Q6702 or	TR	2SC1845-F	(1)	2211732
PCB	Q6702 or	TR	2SC1845-E	(1)	2211733
PCB	Q6703	TR	KTA1268-GR	1	2215885
PCB	Q6703 or	TR	KTA1268-BL	(1)	2215886
PCB	Q6703 or	TR	2SA992-F	(1)	2211792
PCB	Q6703 or	TR	2SA992-E	(1)	2211793
PCB	Q6901	TR	KTC3199-GR	1	2215864
PCB	Q6901 or	TR	2SC2458-GR	(1)	2212115
PCB	Q6901 or	TR	2SC1740S-R	(1)	2213284
PCB	Q6901 or	TR	2SC1740S-S	(1)	2213285
PCB	D921	DIODE	RL1N4003	1	22380260
PCB	D921 or	DIODE	GP104003E	(1)	22380035
PCB	D922	DIODE	RL1N4003	1	22380260
PCB	D922 or	DIODE	GP104003E	(1)	22380035
PCB	D923	DIODE	RL1N4003	1	22380260
PCB	D923 or	DIODE	GP104003E	(1)	22380035
PCB	D924	DIODE	RL1N4003	1	22380260
PCB	D924 or	DIODE	GP104003E	(1)	22380035
PCB	D925	DIODE	1SS133	1	223163
PCB	D925 or	DIODE	1SS270A	(1)	223205
PCB	D925 or	DIODE	WG713A	(1)	223222
PCB	D925 or	DIODE	1N4148M	(1)	223273
PCB	D6000	DIODE	1SS133	1	223163
PCB	D6000 or	DIODE	1SS270A	(1)	223205
PCB	D6000 or	DIODE	WG713A	(1)	223222
PCB	D6001	DIODE	1SS133	1	223163
PCB	D6001 or	DIODE	1SS270A	(1)	223205
PCB	D6001 or	DIODE	WG713A	(1)	223222
PCB	D6002	DIODE	1SS133	1	223163
PCB	D6002 or	DIODE	1SS270A	(1)	223205
PCB	D6002 or	DIODE	WG713A	(1)	223222
PCB	D6003	DIODE	1SS133	1	223163
PCB	D6003 or	DIODE	1SS270A	(1)	223205
PCB	D6003 or	DIODE	WG713A	(1)	223222
PCB	D6004	DIODE	1SS133	1	223163
PCB	D6004 or	DIODE	1SS270A	(1)	223205
PCB	D6004 or	DIODE	WG713A	(1)	223222
PCB	D6005	DIODE	1SS133	1	223163
PCB	D6005 or	DIODE	1SS270A	(1)	223205
PCB	D6005 or	DIODE	WG713A	(1)	223222
PCB	D6010	DIODE	1SS133	1	223163
PCB	D6010 or	DIODE	1SS270A	(1)	223205
PCB	D6010 or	DIODE	WG713A	(1)	223222
PCB	D6011	DIODE	1SS133	1	223163
PCB	D6011 or	DIODE	1SS270A	(1)	223205
PCB	D6011 or	DIODE	WG713A	(1)	223222
PCB	D6012	DIODE	1SS133	1	223163
PCB	D6012 or	DIODE	1SS270A	(1)	223205
PCB	D6012 or	DIODE	WG713A	(1)	223222
PCB	D6013	DIODE	1SS133	1	223163
PCB	D6013 or	DIODE	1SS270A	(1)	223205
PCB	D6013 or	DIODE	WG713A	(1)	223222
PCB	D6014	DIODE	1SS133	1	223163
PCB	D6014 or	DIODE	1SS270A	(1)	223205
PCB	D6014 or	DIODE	WG713A	(1)	223222
PCB	D6015	DIODE	1SS133	1	223163
PCB	D6015 or	DIODE	1SS270A	(1)	223205
PCB	D6015 or	DIODE	WG713A	(1)	223222
PCB	D6306	DIODE	1SS133	1	223163
PCB	D6306 or	DIODE	1SS270A	(1)	223205
PCB	D6306 or	DIODE	WG713A	(1)	223222
PCB	D6307	DIODE	1SS133	1	223163
PCB	D6307 or	DIODE	1SS270A	(1)	223205
PCB	D6307 or	DIODE	WG713A	(1)	223222
PCB	D6701	DIODE	1SS133	1	223163
PCB	D6701 or	DIODE	1SS270A	(1)	223205
PCB	D6701 or	DIODE	WG713A	(1)	223222
PCB	D6701 or	DIODE	1N4148M	(1)	223273
PCB	D6702	DIODE	1SS133	1	223163
PCB	D6702 or	DIODE	1SS270A	(1)	223205
PCB	D6702 or	DIODE	WG713A	(1)	223222

PCB	D6702 or	DIODE	1N4148M	(1)	223273	
PCB	D6703	ZENER D	MTZJ5.1B	1	224470512	
PCB	D6703 or	ZENER D	DZ-5.1BSB	(1)	224850512	
PCB	D6704	ZENER D	MTZJ5.1B	1	224470512	
PCB	D6704 or	ZENER D	DZ-5.1BSB	(1)	224850512	
PCB	D6714	ZENER D	MTZJ5.1B	1	224470512	
PCB	D6714 or	ZENER D	DZ-5.1BSB	(1)	224850512	
PCB	D6903	DIODE	D10XB60H	1	22380337	
PCB	D6903A	HEAT SINK	RAD-196	1	27160545	
PCB	D6903B	SCREW	3P+10FN(BC)	1	82143010	
PCB	D6903C	TAPE	TAPE(CLOTH-16U)	1	29110083	
PCB	D6904	DIODE	D10XB60H	1	22380337	
PCB	D6904B	SCREW	3P+10FN(BC)	1	82143010	
PCB	D6906	DIODE	1SS133	1	223163	
PCB	D6906 or	DIODE	1SS270A	(1)	223205	
PCB	D6906 or	DIODE	WG713A	(1)	223222	
PCB	D6906 or	DIODE	1N4148M	(1)	223273	
PCB	T902	P TRANS	NPT-1492D	1	2301739	! <502 DD,DC>,<520>
PCB	T902	P TRANS	NPT-1358DG	1	2301383	! <502 GR,GK,GQ,WT>
PCB	T902	P TRANS	NPT-1358P	1	2301382	! <502 PA,PT>,<502E>
PCB	L281	CHOKE COIL	NCH-1452 220K	1	233454K220	
PCB	L281 or	CHOKE COIL	NCH-1561 220K	(1)	233526K220	
PCB	L282	CHOKE COIL	NCH-1452 220K	1	233454K220	
PCB	L282 or	CHOKE COIL	NCH-1561 220K	(1)	233526K220	
PCB	L283	CHOKE COIL	NCH-1452 022M	1	233454M022	
PCB	L283 or	CHOKE COIL	NCH-1561 022K	(1)	233526K022	
PCB	C201	VR C	CE04W50V-2.2M(VR)	1	394680227	
PCB	C201 or	ELECT C	CE04W50V2.2M(SC)	(1)	394780227	
PCB	C202	VR C	CE04W50V-2.2M(VR)	1	394680227	
PCB	C202 or	ELECT C	CE04W50V2.2M(SC)	(1)	394780227	
PCB	C203	VR C	CE04W16V-470M(VR)	1	394644717	
PCB	C203 or	ELECT C	CE04W16V470M(SC)	(1)	394744717	
PCB	C204	VR C	CE04W50V-2.2M(VR)	1	394680227	
PCB	C204 or	ELECT C	CE04W50V2.2M(SC)	(1)	394780227	
PCB	C205	VR C	CE04W16V-470M(VR)	1	394644717	
PCB	C205 or	ELECT C	CE04W16V470M(SC)	(1)	394744717	
PCB	C206	CERA C	CK45F50V-223Z	1	335622230	
PCB	C207	VR C	CE04W50V-2.2M(VR)	1	394680227	
PCB	C207 or	ELECT C	CE04W50V2.2M(SC)	(1)	394780227	
PCB	C208	CERA C	CK45F50V-223Z	1	335622230	
PCB	C209	VR C	CE04W50V-2.2M(VR)	1	394680227	
PCB	C209 or	ELECT C	CE04W50V2.2M(SC)	(1)	394780227	
PCB	C210	CERA C	CK45F50V-223Z	1	335622230	
PCB	C211	VR C	CE04W16V-470M(VR)	1	394644717	
PCB	C211 or	ELECT C	CE04W16V470M(SC)	(1)	394744717	
PCB	C212	CERA C	CK45F50V-223Z	1	335622230	
PCB	C213	VR C	CE04W50V-2.2M(VR)	1	394680227	
PCB	C213 or	ELECT C	CE04W50V2.2M(SC)	(1)	394780227	
PCB	C214	CERA C	CK45F50V-223Z	1	335622230	
PCB	C215	VR C	CE04W16V-470M(VR)	1	394644717	
PCB	C216	CERA C	CK45F50V-223Z	1	335622230	
PCB	C217	VR C	CE04W50V-2.2M(VR)	1	394680227	
PCB	C217 or	ELECT C	CE04W50V2.2M(SC)	(1)	394780227	
PCB	C218	VR C	CE04W50V-2.2M(VR)	1	394680227	
PCB	C218 or	ELECT C	CE04W50V2.2M(SC)	(1)	394780227	
PCB	C219	CERA C	CK45F50V-223Z	1	335622230	
PCB	C220	CERA C	CK45F50V-223Z	1	335622230	
PCB	C221	VR C	CE04W16V-47M(VR)	1	394644707	
PCB	C221 or	ELECT C	CE04W16V47M(SC)	(1)	394744707	
PCB	C223	VR C	CE04W16V-47M(VR)	1	394644707	
PCB	C223 or	ELECT C	CE04W16V47M(SC)	(1)	394744707	
PCB	C225	VR C	CE04W16V-47M(VR)	1	394644707	
PCB	C225 or	ELECT C	CE04W16V47M(SC)	(1)	394744707	
PCB	C227	CERA C	CK45F50V-223Z	1	335622230	
PCB	C240	TF C	ECQ-V50V-104J	1	374721044	
PCB	C280	CERA C	CK45F50V-223Z	1	335622230	
PCB	C281	TF C	ECQ-V50V-104J	1	374721044	
PCB	C282	CERA C	CC45SL50V-101J	1	345021014	
PCB	C283	CERA C	CK45F50V-223Z	1	335622230	
PCB	C284	CERA C	CC45SL50V-080D	1	345020802	
PCB	C285	VR C	CE04W6.3V-47M(VR)	1	394624707	
PCB	C286	TF C	ECQ-V50V-104J	1	374721044	
PCB	C287	CERA C	CK45F50V-223Z	1	335622230	

PCB	C288	VR C	CE04W6.3V-47M(VR)	1	394624707	
PCB	C901	IS C	RE275V-103M	1	3500196S	
PCB	C902	IS C	DE1307E472M-KH	1	3300030	<502 PA,PT,GR,GK,GQ,WT>
PCB	C902	IS C	DE1307E472M-KH	1	3300030	<502E><8250>
PCB	C921	CERA C	CK45F50V-223Z	1	335622230	
PCB	C922	VR C	CE04W35V-100M(VR)	1	394661017	
PCB	C923	CERA C	CK45F50V-223Z	1	335622230	
PCB	C6040	VR C	CE04W50V-47M(VR)	1	394684707	
PCB	C6041	VR C	CE04W50V-47M(VR)	1	394684707	
PCB	C6042	VR C	CE04W50V-47M(VR)	1	394684707	
PCB	C6043	VR C	CE04W50V-47M(VR)	1	394684707	
PCB	C6044	VR C	CE04W50V-47M(VR)	1	394684707	
PCB	C6045	VR C	CE04W50V-47M(VR)	1	394684707	
PCB	C6230	TF C	ECQ-V50V-473J	1	374724734	
PCB	C6231	TF C	ECQ-V50V-473J	1	374724734	
PCB	C6232	TF C	ECQ-V50V-473J	1	374724734	
PCB	C6233	TF C	ECQ-V50V-473J	1	374724734	
PCB	C6234	TF C	ECQ-V50V-473J	1	374724734	
PCB	C6235	TF C	ECQ-V50V-473J	1	374724734	
PCB	C6701	VR C	CE04W6.3V-100M(VR)	1	394621017	
PCB	C6701 or	ELECT C	CE04W6.3V100M(SC)	(1)	394721017	
PCB	C6703	CERA C	CK45F50V-223Z	1	335622230	
PCB	C6704	VR C	CE04W50V-1M(VR)	1	394680107	
PCB	C6704 or	ELECT C	CE04W50V1.0M(SC)	(1)	394780107	
PCB	C6706	VR C	CE04W6.3V-100M(VR)	1	394621017	
PCB	C6706 or	ELECT C	CE04W6.3V100M(SC)	(1)	394721017	
PCB	C6708	TF C	ECQ-B50V-223J	1	374722234	
PCB	C6716	VR C	CE04W6.3V-100M(VR)	1	394621017	
PCB	C6901	ELECT C	CE69W63V-10000M	1	3504393	<502>,<502E>,<8250>
PCB	C6901 or	ELECT C	CE69W63V-10000M	(1)	3504403	<502>,<502E>,<8250>
PCB	C6902	ELECT C	CE69W75V-12000M	1	3504394	<520>
PCB	C6901 or	ELECT C	CE69W75V-12000M	(1)	3504405	<520>
PCB	C6901A	RETAINER	(BUS)	1	27141817	<502>,<502E>,<8250>
PCB	C6902	ELECT C	CE69W63V-10000M	1	3504393	<502>,<502E>,<8250>
PCB	C6902 or	ELECT C	CE69W63V-10000M	(1)	3504403	<502>,<502E>,<8250>
PCB	C6902	ELECT C	CE69W75V-12000M	1	3504394	<520>
PCB	C6902 or	ELECT C	CE69W75V-12000M	(1)	3504405	<520>
PCB	C6903	TF C	ECQ-V50V-104J	1	374721044	
PCB	C6904	TF C	ECQ-V50V-334J	1	374723344	
PCB	C6905	TF C	ECQ-V50V-334J	1	374723344	
PCB	C6906	TF C	ECQ-V50V-104J	1	374721044	
PCB	C6907	TF C	ECQ-V50V-104J	1	374721044	
PCB	R201	CARBON R	R16J-75	1	417347504	
PCB	R202	CARBON R	R16J-75	1	417347504	
PCB	R203	CARBON R	R16J-75	1	417347504	
PCB	R204	CARBON R	R16J-100K	1	417341044	
PCB	R205	CARBON R	R16J-75	1	417347504	
PCB	R206	CARBON R	R16J-75	1	417347504	
PCB	R207	CARBON R	R16J-680K	1	417346844	
PCB	R208	CARBON R	R16J-680K	1	417346844	
PCB	R209	CARBON R	R16J-680K	1	417346844	
PCB	R210	CARBON R	R16J-220	1	417342214	
PCB	R211	CARBON R	R16J-75	1	417347504	
PCB	R212	CARBON R	R16J-75	1	417347504	
PCB	R213	CARBON R	R16J-75	1	417347504	
PCB	R214	CARBON R	R16J-75	1	417347504	
PCB	R215	CARBON R	R16J-75	1	417347504	
PCB	R216	CARBON R	R16J-75	1	417347504	
PCB	R217	CARBON R	R16J-100K	1	417341044	
PCB	R218	CARBON R	R16J-100K	1	417341044	
PCB	R219	CARBON R	R16J-75	1	417347504	
PCB	R220	CARBON R	R16J-75	1	417347504	
PCB	R221	CARBON R	R16J-75	1	417347504	
PCB	R222	CARBON R	R16J-75	1	417347504	
PCB	R223	CARBON R	R16J-100K	1	417341044	
PCB	R224	CARBON R	R16J-100K	1	417341044	
PCB	R225	CARBON R	R16J-680K	1	417346844	
PCB	R226	CARBON R	R16J-680K	1	417346844	
PCB	R227	CARBON R	R16J-680K	1	417346844	
PCB	R228	CARBON R	R16J-220	1	417342214	
PCB	R229	CARBON R	R16J-680K	1	417346844	
PCB	R230	CARBON R	R16J-680K	1	417346844	
PCB	R281	CARBON R	R16J-75	1	417347504	

PCB	R282	CARBON R	R16J-470	1	417344714	
PCB	R284	CARBON R	R16J-10K	1	417341034	
PCB	R921	METAL R	RNU1WCJ-8.2	1	453630824	<502 DD,DC>,<520>
PCB	R923	CARBON R	R16J-1K	1	417341024	
PCB	R924	METAL O R	RS1/2WBJ-82	1	443528204	
PCB	R926	METAL O R	RS1WBJ-470	1	443624714	
PCB	R6000	CARBON R	R16J-5.6K	1	417345624	
PCB	R6001	CARBON R	R16J-5.6K	1	417345624	
PCB	R6002	CARBON R	R16J-5.6K	1	417345624	
PCB	R6003	CARBON R	R16J-5.6K	1	417345624	
PCB	R6004	CARBON R	R16J-5.6K	1	417345624	
PCB	R6005	CARBON R	R16J-5.6K	1	417345624	
PCB	R6010	CARBON R	R16J-3.9K	1	417343924	
PCB	R6011	CARBON R	R16J-3.9K	1	417343924	
PCB	R6012	CARBON R	R16J-3.9K	1	417343924	
PCB	R6013	CARBON R	R16J-3.9K	1	417343924	
PCB	R6014	CARBON R	R16J-3.9K	1	417343924	
PCB	R6015	CARBON R	R16J-3.9K	1	417343924	
PCB	R6020	NF CARBON R	R25J-2.2	1	415470224	
PCB	R6021	NF CARBON R	R25J-2.2	1	415470224	
PCB	R6022	NF CARBON R	R25J-2.2	1	415470224	
PCB	R6023	NF CARBON R	R25J-2.2	1	415470224	
PCB	R6024	NF CARBON R	R25J-2.2	1	415470224	
PCB	R6025	NF CARBON R	R25J-2.2	1	415470224	
PCB	R6030	CARBON R	R16J-680	1	417346814	<520>
PCB	R6030	CARBON R	R16J-820	1	417348214	<502 DD,DC>
PCB	R6030	CARBON R	R16J-820	1	417348214	<502 PA,PT,GR,GK,GQ,WT>
PCB	R6030	CARBON R	R16J-820	1	417348214	<502E><8250>
PCB	R6031	CARBON R	R16J-680	1	417346814	<520>
PCB	R6031	CARBON R	R16J-820	1	417348214T	<502 DD,DC>
PCB	R6031	CARBON R	R16J-820	1	417348214T	<502 PA,PT,GR,GK,GQ,WT>
PCB	R6031	CARBON R	R16J-820	1	417348214T	<502E>,<8250>
PCB	R6032	CARBON R	R16J-680	1	417346814	<520>
PCB	R6032	CARBON R	R16J-820	1	417348214T	<502 DD,DC>
PCB	R6032	CARBON R	R16J-820	1	417348214T	<502 PA,PT,GR,GK,GQ,WT>
PCB	R6032	CARBON R	R16J-820	1	417348214T	<502E>,<8250>
PCB	R6033	CARBON R	R16J-680	1	417346814	<520>
PCB	R6033	CARBON R	R16J-820	1	417348214	<502 DD,DC>
PCB	R6033	CARBON R	R16J-820	1	417348214	<502 PA,PT,GR,GK,GQ,WT>
PCB	R6033	CARBON R	R16J-820	1	417348214	<502E>,<8250>
PCB	R6034	CARBON R	R16J-680	1	417346814	<520>
PCB	R6034	CARBON R	R16J-820	1	417348214	<502 DD,DC>
PCB	R6034	CARBON R	R16J-820	1	417348214	<502 PA,PT,GR,GK,GQ,WT>
PCB	R6034	CARBON R	R16J-820	1	417348214	<502E>,<8250>
PCB	R6035	CARBON R	R16J-680	1	417346814	<520>
PCB	R6035	CARBON R	R16J-820	1	417348214	<502 DD,DC>
PCB	R6035	CARBON R	R16J-820	1	417348214	<502 PA,PT,GR,GK,GQ,WT>
PCB	R6035	CARBON R	R16J-820	1	417348214	<502E>,<8250>
PCB	R6040	TRIM R	N06HR1KBC	1	5210258	
PCB	R6041	TRIM R	N06HR1KBC	1	5210258	
PCB	R6042	TRIM R	N06HR1KBC	1	5210258	
PCB	R6043	TRIM R	N06HR1KBC	1	5210258	
PCB	R6044	TRIM R	N06HR1KBC	1	5210258	
PCB	R6045	TRIM R	N06HR1KBC	1	5210258	
PCB	R6050	CARBON R	R16J-3.9K	1	417343924	
PCB	R6051	CARBON R	R16J-3.9K	1	417343924	
PCB	R6052	CARBON R	R16J-3.9K	1	417343924	
PCB	R6053	CARBON R	R16J-3.9K	1	417343924	
PCB	R6054	CARBON R	R16J-3.9K	1	417343924	
PCB	R6055	CARBON R	R16J-3.9K	1	417343924	
PCB	R6070	NF CARBON R	R25J-100	1	415471014	<502 DD,DC>
PCB	R6070	NF CARBON R	R25J-100	1	415471014	<502 PA,PT,GR,GK,GQ,WT>
PCB	R6070	NF CARBON R	R25J-100	1	415471014	<502E>,<8250>
PCB	R6070	NF CARBON R	R25J-120	1	415471214	<520>
PCB	R6071	NF CARBON R	R25J-100	1	415471014	<502 DD,DC>
PCB	R6071	NF CARBON R	R25J-100	1	415471014	<502 PA,PT,GR,GK,GQ,WT>
PCB	R6071	NF CARBON R	R25J-100	1	415471014	<502E>,<8250>
PCB	R6071	NF CARBON R	R25J-120	1	415471214	<520>
PCB	R6072	NF CARBON R	R25J-100	1	415471014	<502 DD,DC>
PCB	R6072	NF CARBON R	R25J-100	1	415471014	<502 PA,PT,GR,GK,GQ,WT>
PCB	R6072	NF CARBON R	R25J-100	1	415471014	<502E><8250>
PCB	R6072	NF CARBON R	R25J-150	1	415471514	<520>
PCB	R6073	NF CARBON R	R25J-100	1	415471014	<502 DD,DC>

PCB	R6073	NF CARBON R	R25J-100	1	415471014	<502 PA,PT,GR,GK,GQ,WT>
PCB	R6073	NF CARBON R	R25J-100	1	415471014	<502E>,<8250>
PCB	R6073	NF CARBON R	R25J-150	1	415471514	<520>
PCB	R6074	NF CARBON R	R25J-100	1	415471014	<502 DD,DC>
PCB	R6074	NF CARBON R	R25J-100	1	415471014	<502 PA,PT,GR,GK,GQ,WT>
PCB	R6074	NF CARBON R	R25J-100	1	415471014	<502E>,<8250>
PCB	R6074	NF CARBON R	R25J-150	1	415471514	<520>
PCB	R6075	NF CARBON R	R25J-100	1	415471014	<502 DD,DC>
PCB	R6075	NF CARBON R	R25J-100	1	415471014	<502 PA,PT,GR,GK,GQ,WT>
PCB	R6075	NF CARBON R	R25J-100	1	415471014	<502E>,<8250>
PCB	R6075	NF CARBON R	R25J-150	1	415471514	<520>
PCB	R6080	NF CARBON R	R25J-2.2	1	415470224	
PCB	R6081	NF CARBON R	R25J-2.2	1	415470224	
PCB	R6082	NF CARBON R	R25J-2.2	1	415470224	
PCB	R6083	NF CARBON R	R25J-2.2	1	415470224	
PCB	R6084	NF CARBON R	R25J-2.2	1	415470224	
PCB	R6085	NF CARBON R	R25J-2.2	1	415470224	
PCB	R6090	NF CARBON R	R25J-2.2	1	415470224	
PCB	R6091	NF CARBON R	R25J-2.2	1	415470224	
PCB	R6092	NF CARBON R	R25J-2.2	1	415470224	
PCB	R6093	NF CARBON R	R25J-2.2	1	415470224	
PCB	R6094	NF CARBON R	R25J-2.2	1	415470224	
PCB	R6095	NF CARBON R	R25J-2.2	1	415470224	
PCB	R6100	CEMENT R	RSS2WK-0.22	1	4800071	
PCB	R6100 or	OTHER R	RGC22-0.22 OHMK	(1)	4000131	
PCB	R6100 or	METAL PR	MPC708-2WK-0.22	(1)	4500027	
PCB	R6101	CEMENT R	RSS2WK-0.22	1	4800071	
PCB	R6101 or	OTHER R	RGC22-0.22 OHMK	(1)	4000131	
PCB	R6101 or	METAL PR	MPC708-2WK-0.22	(1)	4500027	
PCB	R6102	CEMENT R	RSS2WK-0.22	1	4800071	
PCB	R6102 or	OTHER R	RGC22-0.22 OHMK	(1)	4000131	
PCB	R6102 or	METAL PR	MPC708-2WK-0.22	(1)	4500027	
PCB	R6103	CEMENT R	RSS2WK-0.22	1	4800071	
PCB	R6103 or	OTHER R	RGC22-0.22 OHMK	(1)	4000131	
PCB	R6103 or	METAL PR	MPC708-2WK-0.22	(1)	4500027	
PCB	R6104	CEMENT R	RSS2WK-0.22	1	4800071	
PCB	R6104 or	OTHER R	RGC22-0.22 OHMK	(1)	4000131	
PCB	R6104 or	METAL PR	MPC708-2WK-0.22	(1)	4500027	
PCB	R6105	CEMENT R	RSS2WK-0.22	1	4800071	
PCB	R6105 or	OTHER R	RGC22-0.22 OHMK	(1)	4000131	
PCB	R6105 or	METAL PR	MPC708-2WK-0.22	(1)	4500027	
PCB	R6140	CARBON R	R16J-22K	1	417342234	
PCB	R6141	CARBON R	R16J-22K	1	417342234	
PCB	R6142	CARBON R	R16J-22K	1	417342234	
PCB	R6143	CARBON R	R16J-22K	1	417342234	
PCB	R6144	CARBON R	R16J-22K	1	417342234	
PCB	R6145	CARBON R	R16J-22K	1	417342234	
PCB	R6150	CARBON R	R16J-12K	1	417341234	
PCB	R6151	CARBON R	R16J-12K	1	417341234	
PCB	R6152	CARBON R	R16J-12K	1	417341234	
PCB	R6153	CARBON R	R16J-12K	1	417341234	
PCB	R6154	CARBON R	R16J-12K	1	417341234	
PCB	R6155	CARBON R	R16J-12K	1	417341234	
PCB	R6160	CARBON R	R16J-33K	1	417343334	
PCB	R6161	CARBON R	R16J-33K	1	417343334	
PCB	R6162	CARBON R	R16J-33K	1	417343334	
PCB	R6163	CARBON R	R16J-33K	1	417343334	
PCB	R6164	CARBON R	R16J-33K	1	417343334	
PCB	R6165	CARBON R	R16J-33K	1	417343334	
PCB	R6170	CARBON R	R16J-47K	1	417344734	
PCB	R6171	CARBON R	R16J-47K	1	417344734	
PCB	R6172	CARBON R	R16J-47K	1	417344734	
PCB	R6173	CARBON R	R16J-47K	1	417344734	
PCB	R6174	CARBON R	R16J-47K	1	417344734	
PCB	R6175	CARBON R	R16J-47K	1	417344734	
PCB	R6180	CARBON R	R16J-47K	1	417344734	
PCB	R6181	CARBON R	R16J-47K	1	417344734	
PCB	R6182	CARBON R	R16J-47K	1	417344734	
PCB	R6183	CARBON R	R16J-47K	1	417344734	
PCB	R6184	CARBON R	R16J-47K	1	417344734	
PCB	R6185	CARBON R	R16J-47K	1	417344734	
PCB	R6190	CARBON R	R16J-220K	1	417342244	<502 DD,DC>
PCB	R6190	CARBON R	R16J-220K	1	417342244	<502 PA,PT,GR,GK,GQ,WT>

PCB	R6190	CARBON R	R16J-220K	1	417342244	<502E>,<8250>
PCB	R6190	CARBON R	R16J-330K	1	417343344	<520>
PCB	R6191	CARBON R	R16J-220K	1	417342244	<502 DD,DC>
PCB	R6191	CARBON R	R16J-220K	1	417342244	<502 PA,PT,GR,GK,GQ,WT>
PCB	R6191	CARBON R	R16J-220K	1	417342244	<502E>,<8250>
PCB	R6191	CARBON R	R16J-330K	1	417343344	<520>
PCB	R6192	CARBON R	R16J-220K	1	417342244	<502 DD,DC>
PCB	R6192	CARBON R	R16J-220K	1	417342244	<502 PA,PT,GR,GK,GQ,WT>
PCB	R6192	CARBON R	R16J-220K	1	417342244	<502E>,<8250>
PCB	R6192	CARBON R	R16J-330K	1	417343344	<520>
PCB	R6193	CARBON R	R16J-220K	1	417342244	<502 DD,DC>
PCB	R6193	CARBON R	R16J-220K	1	417342244	<502 PA,PT,GR,GK,GQ,WT>
PCB	R6193	CARBON R	R16J-220K	1	417342244	<502E>,<8250>
PCB	R6193	CARBON R	R16J-330K	1	417343344	<520>
PCB	R6194	CARBON R	R16J-220K	1	417342244	<502 DD,DC>
PCB	R6194	CARBON R	R16J-220K	1	417342244	<502 PA,PT,GR,GK,GQ,WT>
PCB	R6194	CARBON R	R16J-220K	1	417342244	<502E>,<8250>
PCB	R6194	CARBON R	R16J-330K	1	417343344	<520>
PCB	R6195	CARBON R	R16J-220K	1	417342244	<502 DD,DC>
PCB	R6195	CARBON R	R16J-220K	1	417342244	<502 PA,PT,GR,GK,GQ,WT>
PCB	R6195	CARBON R	R16J-220K	1	417342244	<502E>,<8250>
PCB	R6195	CARBON R	R16J-330K	1	417343344	<520>
PCB	R6230	METAL R	RNU1WCJ-8.2	1	453630824	
PCB	R6231	METAL R	RNU1WCJ-8.2	1	453630824	
PCB	R6232	METAL R	RNU1WCJ-8.2	1	453630824	
PCB	R6233	METAL R	RNU1WCJ-8.2	1	453630824	
PCB	R6234	METAL R	RNU1WCJ-8.2	1	453630824	
PCB	R6235	METAL R	RNU1WCJ-8.2	1	453630824	
PCB	R6306	CARBON R	R16J-10K	1	417341034	
PCB	R6307	CARBON R	R16J-470	1	417344714	
PCB	R6308	CARBON R	R16J-4.7K	1	417344724	
PCB	R6317	CARBON R	R16J-470	1	417344714	
PCB	R6318	CARBON R	R16J-4.7K	1	417344724	
PCB	R6380	RESISTOR	PTFL04BF471Q2N34B0 (80)	1	4000217	
PCB	R6381	RESISTOR	PTFL04BC471Q2N34B0 (110)	1	4000220	
PCB	R6601	CARBON R	R16J-1K	1	417341024	
PCB	R6602	CARBON R	R16J-1K	1	417341024	
PCB	R6603	CARBON R	R16J-1K	1	417341024	
PCB	R6604	METAL R	RNU1/2WCJ-8.2	1	453530824	
PCB	R6605	METAL R	RNU1/2WCJ-8.2	1	453530824	
PCB	R6701	CARBON R	R16J-22K	1	417342234	
PCB	R6702	CARBON R	R16J-10K	1	417341034	
PCB	R6704	CARBON R	R16J-47K	1	417344734	
PCB	R6706	CARBON R	R16J-220K	1	417342244	
PCB	R6708	CARBON R	R16J-33K	1	417343334	
PCB	R6709	CARBON R	R16J-5.6K	1	417345624	
PCB	R6710	CARBON R	R16J-12K	1	417341234	<520>
PCB	R6710	CARBON R	R16J-47K	1	417344734	<502 DD,DC>
PCB	R6710	CARBON R	R16J-47K	1	417344734	<502 PA,PT,GR,GK,GQ,WT>
PCB	R6710	CARBON R	R16J-47K	1	417344734	<502E>,<8250>
PCB	R6719	CARBON R	R16J-5.6K	1	417345624	
PCB	R6902	CARBON R	R16J-1K	1	417341024	
PCB	R6980	METAL O R	RS1/2WBJ-390	1	443523914	
PCB	R6981	METAL O R	RS1/2WBJ-390	1	443523914	
PCB	RL901	RELAY	NRL-1P10A-DC12-140	1	25065584	<502 DD,DC,WT>
PCB	RL901 or	RELAY	NRL-1P10A-DC12-097	(1)	25065516	<502 DD,DC,WT>
PCB	RL901	RELAY	NRL-1P10A-DC12-140	1	25065584	<520>
PCB	RL901 or	RELAY	NRL-1P10A-DC12-097	(1)	25065516	<520>
PCB	RL901	RELAY	NRL-1P5A-DC12-127	1	25065561	<502 PA,PT,GR,GK,GQ>
PCB	RL901 or	RELAY	NRL-1P10A-DC12-093	(1)	25065508	<502 PA,PT,GR,GK,GQ>
PCB	RL901 or	RELAY	NRL-1P5A-DC12-096	(1)	25065515	<502 PA,PT,GR,GK,GQ>
PCB	RL901 or	RELAY	NRL-1P5A-DC12-102	(1)	25065526	<502 PA,PT,GR,GK,GQ>
PCB	RL901	RELAY	NRL-1P5A-DC12-127	1	25065561	<502E>
PCB	RL901 or	RELAY	NRL-1P10A-DC12-093	(1)	25065508	<502E>
PCB	RL901 or	RELAY	NRL-1P5A-DC12-096	(1)	25065515	<502E>
PCB	RL901 or	RELAY	NRL-1P5A-DC12-102	(1)	25065526	<502E>
PCB	RL901A	TAPE	TAPE(CLOTH-16U)	1	29110083	
PCB	RL6901	RELAY	NRL-1P10A-DC12-140	1	25065584	<502 DD,DC>
PCB	RL6901 or	RELAY	NRL-1P10A-DC12-097	(1)	25065516	<502 DD,DC>
PCB	RL6901	RELAY	NRL-1P10A-DC12-140	1	25065584	<502 PA,PT,GR,GK,GQ,WT>
PCB	RL6901 or	RELAY	NRL-1P10A-DC12-097	(1)	25065516	<502 PA,PT,GR,GK,GQ,WT>
PCB	RL6901	RELAY	NRL-1P10A-DC12-140	1	25065584	<502E><8250>
PCB	RL6901 or	RELAY	NRL-1P10A-DC12-097	(1)	25065516	<502E><8250>

PCB	RL6901	RELAY	NRL-1P5A-DC12-127	1	25065561	<520>
PCB	RL6901 or	RELAY	NRL-1P10A-DC12-093	(1)	25065508	<520>
PCB	RL6901 or	RELAY	NRL-1P5A-DC12-096	(1)	25065515	<520>
PCB	RL6901 or	RELAY	NRL-1P5A-DC12-102	(1)	25065526	<520>
PCB	RL6901A	TAPE	TAPE(CLOTH-16U)	1	29110083	
PCB	RL6902	RELAY	NRL-1P10A-DC12-140	1	25065584	<502 DD,DC>
PCB	RL6902 or	RELAY	NRL-1P10A-DC12-097	(1)	25065516	<502 DD,DC>
PCB	RL6902	RELAY	NRL-1P10A-DC12-140	1	25065584	<502 PA,PT,GR,GK,GQ,WT>
PCB	RL6902 or	RELAY	NRL-1P10A-DC12-097	(1)	25065516	<502 PA,PT,GR,GK,GQ,WT>
PCB	RL6902	RELAY	NRL-1P10A-DC12-140	1	25065584	<502E>,<,8250>
PCB	RL6902 or	RELAY	NRL-1P10A-DC12-097	(1)	25065516	<502E>,<,8250>
PCB	RL6902	RELAY	NRL-1P5A-DC12-127	1	25065561	<520>
PCB	RL6902 or	RELAY	NRL-1P10A-DC12-093	(1)	25065508	<520>
PCB	RL6902 or	RELAY	NRL-1P5A-DC12-096	(1)	25065515	<520>
PCB	RL6902 or	RELAY SW	NRL-1P5A-DC12-102	(1)	25065526	<520>
PCB	RL6902A	TAPE	TAPE(CLOTH-16U)	1	29110083	
PCB	F901A	FUSE HOL	NSCT-1P2031	1	25052133	! <502 DD,DC,WT>,<520>
PCB	F901B	FUSE HOL	NSCT-1P2031	1	25052133	! <502 DD,DC,WT>,<520>
PCB	F901C	FUSE LABEL	6.3A/125V	1	29362027	<502 DD,DC,WT>
PCB	F902A	FUSE HOL	NSCT-1P2031	1	25052133	! <502 PA,PT,GR,GK,GQ,WT>
PCB	F902A	FUSE HOL	NSCT-1P2031	1	25052133	! <502E>,<8250>
PCB	F902B	FUSE HOL	NSCT-1P2031	1	25052133	! <502 PA,PT,GR,GK,GQ,WT>
PCB	F902B	FUSE HOL	NSCT-1P2031	1	25052133	! <502E>,<8250>
PCB	F903A	FUSE HOL	NSCT-1P2031	1	25052133	!
PCB	F903B	FUSE HOL	NSCT-1P2031	1	25052133	!
PCB	F903C	LABEL	T2.5AL250V	1	29361747	<502 PA,PT,GR,GK,GQ,WT>
PCB	F903C	LABEL	T2.5AL250V	1	29361747	<502E>,<8250>
PCB	F6901A	FUSE HOL	NSCT-1P2031	1	25052133	!
PCB	F6901B	FUSE HOL	NSCT-1P2031	1	25052133	!
PCB	F6901C	FUSE LABEL	T10AL250V	1	29362801	<502 PA,PT,GR,GK,GQ,WT>
PCB	F6901C	FUSE LABEL	T10AL250V	1	29362801	<502E>,<8250>
PCB	F6902A	FUSE HOL	NSCT-1P2031	1	25052133	!
PCB	F6902B	FUSE HOL	NSCT-1P2031	1	25052133	!
PCB	P201	PIN JACK	NPJ-10PDBY517	1	25045729	
PCB	P202	PIN JACK	NPJ-15PDBY515	1	25045727	
PCB	P206B	SOCKET	NSCT-15P1030	1	25051240	
PCB	P253A	PLUG	NPLG-5P220	1	25055236	
PCB	P281	PIN JACK	NPJ-1PDOR369	1	25045548	
PCB	P281 or	PIN JACK	NPJ-1PDO553	(1)	25045771	
PCB	P282	ST JACK	LGY2502-0200C	1	25045696	
PCB	P901A	PLUG	NPLG-2P631	1	25055675	
PCB	P901Aor	PLUG	1-1123724-2	(1)	25056402	
PCB	P902	SOCKET	NSCT-2P1358	1	25051571	<502 DD,DC>
PCB	P902	SOCKET	NSCT-2P1359	1	25051572	<502 GQ,PT,WT>.<502E>
PCB	P902	SOCKET	NSCT-2P1358	1	25051571	<502 DD,DC>,<520>
PCB	P902 or	AC OUTLET	AC-181-UL-11V	(1)	25053030	<502 DD,DC>,<520>
PCB	P902	SOCKET	NSCT-2P1359	1	25051572	<502E>
PCB	P902	AC OUTLET	NSCT-2P2013	1	25052115	<502 PA>
PCB	P902	AC OUTLET	NSCT-2P2560	1	25052664	<502 GR>,<8250>
PCB	P902 or	AC OUTLET	AC-181-GB-11VGY5311	(1)	25053032	<502 GR>,<8250>
PCB	P902	SOCKET	NSCT-2P1359	1	25051572	<502 WT>,<502 GQ, PT>
PCB	P911	CRIMP AS	CRIMP AS	1	2069943259UL	
PCB	P912	CRIMP AS	CRIMP AS	1	2069943224UL	<502 DD,DC,PA,PT,WT>
PCB	P912	CRIMP AS	CRIMP AS	1	2069943224UL	<520>,<502E>
PCB	P913	CRIMP AS	CRIMP AS	1	2069943206UL	<502 GR,GK,GQ,WT>
PCB	P913	CRIMP AS	CRIMP AS	1	2069943206UL	<8250>
PCB	P917	CRIMP AS	CRIMP AS	1	2069943359UL	<502 PA,PT,GR,GK,GQ,WT>
PCB	P917	CRIMP AS	CRIMP AS	1	2069943359UL	<502E>.<8250>
PCB	P918	CRIMP AS	CRIMP AS	1	2069943358UL	<502 PA,PT,GR,GK,GQ,WT>
PCB	P918	CRIMP AS	CRIMP AS	1	2069943358UL	<502E>.<8250>
PCB	P921	CRIMP AS	CRIMP-AS	1	2069943101UL	<502 WT>
PCB	P922	CRIMP AS	CRIMP-AS	1	2069943103UL	<502 WT>
PCB	P923	CRIMP AS	CRIMP AS	1	2069943106UL	<502 WT>
PCB	P925	CRIMP AS	CRIMP-AS	1	2069943153UL	<502 GK>
PCB	P926	CRIMP AS	CRIMP-AS	1	2069943154UL	<502 GK>
PCB	P931	PLUG	NPLG-5P657	1	25055701	
PCB	P931A	SOCKET	NSCT-5P1020	1	25051230	
PCB	P995	SOCKET AS	NSAS-6P1334	1	2009990875UL	
PCB	P6000	PLUG	NPLG-5P0960	1	25056010	
PCB	P6001	PLUG	NPLG-5P0960	1	25056010	
PCB	P6002	PLUG	NPLG-5P0960	1	25056010	
PCB	P6003	PLUG	NPLG-5P0960	1	25056010	
PCB	P6004	PLUG	NPLG-5P0960	1	25056010	

PCB	P6005	PLUG	NPLG-5P0960	1	25056010	
PCB	P6011	PLUG	NPLG-10P0965	1	25056015	
PCB	P6072A	TRM	NTM-1P232(M1700)	1	25060301	
PCB	P6073A	TRM	NTM-1P232(M1700)	1	25060301	
PCB	P6080	PLUG	NPLG-2P29	1	25055038	
PCB	P6081	PLUG	NPLG-2P29	1	25055038	
PCB	P6082	PLUG	NPLG-2P29	1	25055038	
PCB	P6083	PLUG	NPLG-2P29	1	25055038	
PCB	P6084	PLUG	NPLG-2P29	1	25055038	
PCB	P6085	PLUG	NPLG-2P29	1	25055038	
PCB	P6301	PLUG	NPLG-3P32	1	25055042	
PCB	P6380	SHLD CASE	(THERMISTOR)	1	27225154A	
PCB	P6903	BUS BAR	BBL15	1	27141869	
PCB	P6906	RETAINER	KANAGU	1	27141059	
PCB	P6907	TRM(SCREW)	NEGITANSI M3	1	25065425	
PCB	P6910	TRM(SCREW)	NEGITANSI M3	1	25065425	<502 GK>
PCB	P6931	PLUG	NPLG-16P761	1	25055805	
PCB	P6981	WS CLAMP	CB-71694(L=30)	1	260260	
PCB	S902	SLIDE SW	NSS-22157P	1	25065437	<502 WT>
PCB	S906	PUSH SW	NPS-121-L665P	1	25035702	<502 DD,DC>
PCB	S906	PUSH SW	NPS-121-L665P	1	25035702	<502 PA,PT,GR,GK,GQ,WT>
PCB	S906	PUSH SW	NPS-121-L665P	1	25035702	<502E>,<8250>
PCB	J010	CRIMP AS	CRIMP AS	1	2069925151UL	
PCB	J011	CRIMP AS	CRIMP AS	1	2069925266UL	
PCB	JL6402A	WIRE HOL	NSCT-3P874	1	25051087	
PCB	JL6402B	WIRE HOL	NSCT-3P874	1	25051087	
PCB	JL6803A	WIRE HOL	NSCT-6P897	1	25051110	
PCB	JL6804A	WIRE HOL	NSCT-6P897	1	25051110	
PCB	JL6805A	WIRE HOL	NSCT-4P895	1	25051108	
PCB	JL6952A	WIRE HOL	NSCT-5P896	1	25051109	
PCB	JL6952B	WIRE HOL	NSCT-5P896	1	25051109	

TX-SR502/E/8250/HT-R520

PACKING PROCEDURES PARTS LIST

<Notes>

<**502**>:TX-SR502
<**502E**>:TX-SR502E(European model)
<**8250**>:TX-SR8250(Chinese model)
(B) : Black model
(S) : Silver model
(G) : Golden model

<**DC**> : Canadian model
<**DD**> : American model
<**GK**> : Korean model
<**GQ**> : Hong kong model
<**GR**> : Chinese model
<**PA**> : Australian model
<**PT**> : Asian model (230-240V)
<**WT**> : World wide model

	REF. NO.	NAME	DESCRIPTION	Q'TY	PART NO	REMARKS
PKG	A601	PAD	AS	1	29092044A	<502>,<502E>,<8250>
PKG	A603	POLY BAG	POLY BAG(850 x 650)	1	29100034-1A	
PKG	A604	SHEET	For Remote Controller	1	29095969	<502>,<502E>,<8250>
PKG	A605	TAPE	NITTO NO.29	3	29110149	
PKG	A607	PP TAPE	W48 OPP TAPE	1	29110148	<502>,<502E>,<8250>
PKG	A620	POLY BAG	350 x 250	1	29100097-1A	<502>,<8250>
PKG	A620	POLY BAG	250 x 250 x W300	1	29100218	<520>,<502E>
PKG	A624	LABEL	SP CABLE	1	29363059A	<502>,<502E>,<8250>
PKG	A701	CARTON	---	1	29054150	<502 DD>(B)
PKG	A701	CARTON	---	1	29054152	<502E>(B)
PKG	A701	CARTON	---	1	29054153	<502E>(S)
PKG	A701	CARTON	---	1	29054154	<502 DC,PA,WT> (B)
PKG	A701	CARTON	---	1	29054155	<502 DC,PA,WT> (S)
PKG	A701	CARTON	---	1	29054156	<502 GQ,PT,GK,WT> (G)
PKG	A701	CARTON	---	1	29054157	<502 GR> (G)
PKG	A701	CARTON	---	1	29054158	<8250>
PKG	A701	CARTON	---	1	29054180	<502 GR> (S)
PKG	A702	POLY BAG	250 x 250 x W300	1	29100218	<502 GR> (S)
PKG	A703	UPC LABEL	---	1	29363632	<502 DD,DC> (B)
PKG	A703	UPC LABEL	---	1	29363633	<502 DC> (S)
PKG	A703	EAN LABEL	---	1	29363636	<502E> (B)
PKG	A703	EAN LABEL	---	1	29363637	<502E> (S)
PKG	A703	EAN LABEL	---	1	29363638	<502 PA,WT> (B)
PKG	A703	EAN LABEL	---	1	29363639	<502 PA,GR,WT> (S)
PKG	A703	EAN LABEL	---	1	29363640	<502> (G)
PKG	A703	EAN LABEL	---	1	29363681	<8250> (G)
PKG	A801	INS MANUAL	En(TX-SR502/8250)	1	29343629C	<502>,<502E>,<8250>
PKG	A802	INS MANUAL	U2FrEs(TX-SR502)	1	29343630A	<502E>

PKG	A803	INS MANUAL	U2FrEs(TX-SR502)	1	29343630A	<502 DC>
PKG	A803	INS MANUAL	U4ItDeNlSv(TX-SR502)	1	29343631	<502E>
PKG	A804	INS MANUAL	U2CtCs(TX-SR502)	1	29343632B	<502 WT,GR>
PKG	A804	INS MANUAL	U2CtCs(TX-SR502)	1	29343632A	<8250>
PKG	A807	INS MANUAL	En-DIG(TX-SR502)	1	29343643	<502 DD>
PKG	A811	REMO CON	RC-567M	1	24140567	<502 DC,DD>
PKG	A811	REMO CON	RC-569M	1	24140569	<502 PA,WT,GR>
PKG	A811	REMO CON	RC-569M	1	24140569	<502E>,<8250>
PKG	A812	BATTERY	R6/AA(UM-3)	2	3010194	
PKG	A812 or	BATTERY	R6/AA(UM-3)	(2)	3010054	
PKG	A820	ANT COIL	NMA-3057	1	232140	
PKG	A821	FM ANT AS	Type W	1	292191	
PKG	A822	FM ADPTER	YAE21-0237	1	25065462	<502 PA,WT,GR>
PKG	A822	FM ADPTER	YAE21-0237	1	25065462	<8250>
PKG	A823	CV PLUG	CV-K-1	1	25056005	<502 WT>
PKG	A845	WRNTY CARD	(ONKYO)	1	29365090B	<502 DC,DD>
PKG	A845	WRNTY CARD		1	29365098	<502 GR>,<8250>

ONKYO CORPORATION
Sales & Product Planning Div. : 2-1, Nisshin-cho, Neyagawa-shi, OSAKA 572-8540, JAPAN
Tel: 072-831-8023 Fax: 072-831-8124

ONKYO U.S.A. CORPORATION
18 Park Way, Upper Saddle River, N.J. 07458, U.S.A.
Tel: 201-785-2600 Fax: 201-785-2650 http://www.onkyousa.com

ONKYO EUROPE ELECTRONICS GmbH
Liegnitzerstrasse 6, 82194 Groebenzell, GERMANY
Tel: +49-8142-4401-0 Fax: +49-8142-4401-555 http://www.onkyo.net

ONKYO CHINA LIMITED
Units 2102-2107, Metroplaza Tower I, 223 Hing Fong Road, Kwai Chung,
N.T., HONG KONG Tel: 852-2429-3118 Fax: 852-2428-9039

ONKYO
HOMEPAGE
http://www.onkyo.com/